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SALUS POPULI SUPREMA LEX ESTO

"The welfare of the people shall be the supreme law."

ROBIN CARNAHAN

SECRETARY OF STATE

MISSOURI REGISTER

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Documents will be accepted for filing on all regular workdays from 8:00 a.m. until 5:00 p.m. We encourage early filings to facilitate the timely publication of the *Missouri Register*. Orders of Rulemaking appearing in the *Missouri Register* will be published in the *Code of State Regulations* and become effective as listed in the chart above. Advance notice of large volume filings will facilitate their timely publication. We reserve the right to change the schedule due to special circumstances. Please check the latest publication to verify that no changes have been made in this schedule. To review the entire year's schedule, please check out the website at http://www.sos.mo.gov/adrules/pubsched.asp

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HOW TO CITE RULES AND RSMo

RULES—Cite material in the *Missouri Register* by volume and page number, for example, Vol. 28, *Missouri Register*, page 27. The approved short form of citation is 28 MoReg 27.

The rules are codified in the *Code of State Regulations* in this system—

Title	***Code of State Regulations***	**Division**	**Chapter**	**Rule**
1	CSR	10-	1.	010
Department		Agency, Division	General area regulated	Specific area regulated

They are properly cited by using the full citation , i.e., 1 CSR 10-1.010.

Each department of state government is assigned a title. Each agency or division within the department is assigned a division number. The agency then groups its rules into general subject matter areas called chapters and specific areas called rules. Within a rule, the first breakdown is called a section and is designated as (1). Subsection is (A) with further breakdown into paragraph 1., subparagraph A., part (I), subpart (a), item I. and subitem a.

RSMo—The most recent version of the statute containing the section number and the date.

Rules appearing under this heading are filed under the authority granted by section 536.025, RSMo 2000. An emergency rule may be adopted by an agency if the agency finds that an immediate danger to the public health, safety, or welfare, or a compelling governmental interest requires emergency action; follows procedures best calculated to assure fairness to all interested persons and parties under the circumstances; follows procedures which comply with the protections extended by the *Missouri* and the *United States Constitutions*; limits the scope of such rule to the circumstances creating an emergency and requiring emergency procedure, and at the time of or prior to the adoption of such rule files with the secretary of state the text of the rule together with the specific facts, reasons, and findings which support its conclusion that there is an immediate danger to the public health, safety, or welfare which can be met only through the adoption of such rule and its reasons for concluding that the procedure employed is fair to all interested persons and parties under the circumstances.

Rules filed as emergency rules may be effective not less than ten (10) days after filing or at such later date as may be specified in the rule and may be terminated at any time by the state agency by filing an order with the secretary of state fixing the date of such termination, which order shall be published by the secretary of state in the *Missouri Register* as soon as practicable.

All emergency rules must state the period during which they are in effect, and in no case can they be in effect more than one hundred eighty (180) calendar days or thirty (30) legislative days, whichever period is longer. Emergency rules are not renewable, although an agency may at any time adopt an identical rule under the normal rulemaking procedures.

Title 20—DEPARTMENT OF INSURANCE, FINANCIAL INSTITUTIONS AND PROFESSIONAL REGISTRATION
Division 2200—State Board of Nursing
Chapter 4—General Rules

EMERGENCY AMENDMENT

20 CSR 2200-4.010 Fees. The board is proposing to amend subsection (1)(J).

PURPOSE: The State Board of Nursing is statutorily obligated to enforce and administer the provisions of sections 335.011 to 335.355, RSMo. Pursuant to section 335.036, RSMo, the board shall by rule and regulation set the amount of fees authorized by sections 335.011 to 335.355, RSMo, so that the revenue produced is sufficient, but not excessive, to cover the cost and expense to the board for administering the provisions of sections 335.011 to 335.355, RSMo. Based on the board's five (5)-year projections, the board finds it necessary to reduce fees for the upcoming renewal periods for 2011 and 2012.

EMERGENCY STATEMENT: The State Board of Nursing is statutorily obligated to enforce and administer the provisions of sections 335.011 to 335.355, RSMo. Pursuant to section 335.036, RSMo, the board shall by rule and regulation set the amount of fees authorized by sections 335.011 to 335.355, RSMo, so that the revenue produced is sufficient, but not excessive, to cover the cost and expense to the board for administering the provisions of sections 335.011 to 335.355, RSMo. The board is proposing to decrease the registered professional nurse (RN) license renewal fee from sixty dollars ($60) to thirty-five dollars ($35) and the licensed practical nurse license (LPN) renewal fee from fifty-two dollars ($52) to twenty-seven dollars ($27) beginning January 1, 2011, and continuing through December 31, 2012. The RN license expires on April 30, 2011, and the LPN license expires on May 31, 2012. However, reinstatement of a lapsed or inactive license is not limited to a renewal period and can occur at anytime.

The renewal notices for RNs will be mailed in January 2011, and any RN or LPN wishing to reinstate their license during 2011 and 2012 will be assessed the decreased renewal fee. Without this emergency amendment, the decreased fee requirement will not be effective in time for the renewal notice and the board will collect more revenue that it is statutorily authorized to collect.

*The scope of the emergency amendment is limited to the circumstances creating the emergency and complies with the protections extended in the **Missouri** and **United States Constitutions**. In developing this emergency amendment, the board has determined that the fee decrease is necessary beginning January 1, 2011, and continuing through December 31, 2012, to prevent funds from exceeding the maximum fund balance thereby resulting in a transfer from the fund to general revenue as set forth in section 331.070.2, RSMo. Pursuant to section 324.001.10, RSMo, a compelling governmental interest is deemed to exist for the purposes of section 536.025, RSMo, for licensure fees to be reduced by emergency rule, if the projected fund balance of any agency assigned to the division of professional registration is reasonably expected to exceed an amount that would require transfer from that fund to general revenue. The board believes this emergency amendment to be fair to all interested parties under the circumstances. This emergency amendment was filed January 4, 2011, becomes effective January 14, 2011, and expires July 12, 2011.*

(1) The following fees are established by the State Board of Nursing:

(J) Biennial Renewal Fee—

1. RN—	
A. Effective January 1, 2009	$ 60
B. Effective January 1, 2011, to December 31, 2012	**$ 40**
C. Effective January 1, 2013	**$ 60**
2. LPN—	
A. Effective January 1, 2009	$ 52
B. Effective January 1, 2011, to December 31, 2012	**$ 32**
C. Effective January 1, 2013	**$ 52**

3. License renewal for a professional nurse shall be biennial; occurring on odd-numbered years and the license shall expire on April 30 of each odd-numbered year. License renewal for a practical nurse shall be biennial; occurring on even-numbered years and the license shall expire on May 31 of each even-numbered year. Renewal shall be for a twenty-four (24)-month period except in instances when renewal for a greater or lesser number of months is caused by acts or policies of the Missouri State Board of Nursing. Renewal applications (see 20 CSR 2200-4.020) shall be mailed every even-numbered year by the Missouri State Board of Nursing to all LPNs currently licensed and every odd-numbered year to all RNs currently licensed;

4. Renewal fees for each biennial renewal period shall be accepted by the Missouri State Board of Nursing only if accompanied by an appropriately completed renewal application**[.]; and**

5. All fees established for licensure or licensure renewal of nurses incorporate an educational surcharge in the amount of one dollar ($1) per year for practical nurses and five dollars ($5) per year for professional nurses. These funds are deposited in the professional and practical nursing student loan and nurse repayment fund;

*AUTHORITY: sections **324.001.10 and** 335.036, RSMo Supp. [2008] **2010** and section 335.046, RSMo 2000. This rule originally filed as 4 CSR 200-4.010. Emergency rule filed Aug. 13, 1981, effective Aug. 23,*

1981, expired Dec. 11, 1981. Original rule filed Aug. 13, 1981, effective Nov. 12, 1981. For intervening history, please consult the ***Code of State Regulations****. Emergency amendment filed Jan. 4, 2011, effective Jan. 14, 2011, expires July 12, 2011. A proposed amendment covering this same material is published in this issue of the* ***Missouri Register****.*

The Secretary of State shall publish all executive orders beginning January 1, 2003, pursuant to section 536.035.2, RSMo Supp. 2010.

EXECUTIVE ORDER
11-01

WHEREAS, the State Emergency Management Agency has advised me that severe weather has caused a natural disaster of significant proportions in Missouri; and

WHEREAS, the severe winter weather that began on December 30, 2010 has created a condition of distress and hazards to the safety and welfare of the citizens of the state of Missouri beyond the capabilities of some local jurisdictions and other established agencies; and

WHEREAS, the Missouri Department of Natural Resources is charged by law with protecting and enhancing the quality of Missouri's environment and with enforcing a variety of environmental rules and regulations; and

WHEREAS, in order to respond to the emergency and expedite the cleanup and recovery process, it is necessary to adjust certain environmental rules and regulations on a temporary and short-term basis.

NOW THEREFORE, I, JEREMIAH W. (JAY) NIXON, GOVERNOR OF THE STATE OF MISSOURI, by virtue of the authority vested in me by Chapter 44, RSMo, do hereby issue the following order:

The Director of the Missouri Department of Natural Resources is vested with full discretionary authority to temporarily waive or suspend the operation of any statutory or administrative rule or regulation currently in place under her purview in order to best serve the interests of the public health and safety during the period of the emergency and the subsequent recovery period.

This order shall terminate on January 31, 2011, unless extended in whole or in part.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Missouri, in the City of Jefferson, on this 4th day of January, 2011.

Jeremiah W. (Jay) Nixon
Governor

ATTEST:

Robin Carnahan
Secretary of State

Under this heading will appear the text of proposed rules and changes. The notice of proposed rulemaking is required to contain an explanation of any new rule or any change in an existing rule and the reasons therefor. This is set out in the Purpose section with each rule. Also required is a citation to the legal authority to make rules. This appears following the text of the rule, after the word "Authority."

Entirely new rules are printed without any special symbology under the heading of the proposed rule. If an existing rule is to be amended or rescinded, it will have a heading of proposed amendment or proposed rescission. Rules which are proposed to be amended will have new matter printed in boldface type and matter to be deleted placed in brackets.

An important function of the *Missouri Register* is to solicit and encourage public participation in the rulemaking process. The law provides that for every proposed rule, amendment, or rescission there must be a notice that anyone may comment on the proposed action. This comment may take different forms.

If an agency is required by statute to hold a public hearing before making any new rules, then a Notice of Public Hearing will appear following the text of the rule. Hearing dates must be at least thirty (30) days after publication of the notice in the *Missouri Register.* If no hearing is planned or required, the agency must give a Notice to Submit Comments. This allows anyone to file statements in support of or in opposition to the proposed action with the agency within a specified time, no less than thirty (30) days after publication of the notice in the *Missouri Register*.

An agency may hold a public hearing on a rule even though not required by law to hold one. If an agency allows comments to be received following the hearing date, the close of comments date will be used as the beginning day in the ninety (90)-day-count necessary for the filing of the order of rulemaking.

If an agency decides to hold a public hearing after planning not to, it must withdraw the earlier notice and file a new notice of proposed rulemaking and schedule a hearing for a date not less than thirty (30) days from the date of publication of the new notice.

Proposed Amendment Text Reminder:
Boldface text indicates new matter.
[Bracketed text indicates matter being deleted.]

Title 2—DEPARTMENT OF AGRICULTURE
Division 90—Weights and Measures
Chapter 30—Petroleum Inspection

PROPOSED AMENDMENT

2 CSR 90-30.080 Measuring Devices. The director is amending section (12) and adding a new section (19).

PURPOSE: This amendment modifies the size specifications for diesel fuel and kerosene nozzles and adds a section establishing color coding for dispenser nozzles to reduce instances of misfueling.

(12) Size of Nozzle Spout for Dispensing Motor Fuels. Each dispensing device from which gasoline or other motor fuel that contains lead or phosphorus, **diesel fuel, or kerosene** is sold shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than ninety-three hundredths inch (0.93") (two and three hundred sixty-two thousandths centimeters (2.362 cm)). A gasoline or other motor fuel is considered to contain lead or phosphorus if it contains more than five hundredths (0.05) grams lead per United States gallon (thirteen thousandths (0.013) grams lead per liter) or more than five thousandths (0.005) grams phosphorus per United States gallon (thirteen ten thousandths (0.0013) per liter).

(19) Colored dispenser nozzles or nozzle covers shall be used for all products. The color convention shall apply to the following products:

(A) Gasoline (all grades) including blends up to ten percent (10%) ethanol shall be black in color;

(B) E85 and intermediate blends intended for use in only flexible-fuel vehicles shall be yellow in color;

(C) Diesel fuel intended for on-highway use shall be green in color;

(D) Diesel fuel intended for off-highway use shall be red in color; and

(E) Kerosene shall be blue in color.

*AUTHORITY: section 414.142, RSMo Supp. [1998] **2010**. This rule was previously filed as 2 CSR 90-30.020. Emergency rule filed Dec. 1, 1987, effective Jan. 1, 1988, expired March 1, 1988. Original rule filed Oct. 16, 1987, effective Feb. 11, 1988. Amended: Filed April 2, 1990, effective June 28, 1990. Amended: Filed April 14, 1994, effective Sept. 30, 1994. Amended: Filed April 8, 1999, effective Nov. 30, 1999. Amended: Filed Jan. 18, 2011.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will cost private entities thirty-eight thousand one hundred fifteen dollars ($38,115) in the aggregate.

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with the Missouri Department of Agriculture, Weights and Measures Division, PO Box 630, Jefferson City, MO 65102-0630. To be considered, comments must be received within thirty days (30) days after publication of this notice in the **Missouri Register**.*

FISCAL NOTE
PRIVATE COST

I. Department Title: Department of Agriculture
Division Title: Weights and Measures
Chapter Title: Petroleum Inspection

Rule Number and Title:	2 CSR 90-30.080 Measuring Devices
Type of Rulemaking:	Proposed Amendment

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
4,000	**Retail filling stations**	**$38,115**

III. WORKSHEET

The majority of dispenser nozzles currently comply with the proposed rule. The projected conformance rate for each product type is:

- Ninety percent of the 3,000 on-highway diesel nozzles
- Ninety-eight of the 28,000 gasoline nozzles
- One hundred percent of the 300 E85 nozzles
- Five percent of the kerosene nozzles; and
- Five percent of the 400 off-highway diesel nozzles

The estimated cost for the remaining non-conforming nozzles is a sum of $38,115 (4,235 nozzles at $9/nozzle).

IV. ASSUMPTIONS

Based upon the numbers above, the Department of Agriculture estimates there are approximately 4,235 nozzles that do not comply with the requirements of this proposed amendment. However, some cost would be offset by reducing the number of consumer claims against facility owners related to misfueling.

The cost of replacement is $9.00 per nozzle.

Title 2—DEPARTMENT OF AGRICULTURE
Division 90—Weights and Measures
Chapter 30—Petroleum Inspection

PROPOSED RULE

2 CSR 90-30.086 Financial Responsibility for Aboveground Storage Tank Owners and Operators

PURPOSE: This rule establishes allowable mechanisms for owners and operators of regulated aboveground storage tanks to demonstrate financial responsibility for releases of products from those tanks as required by section 414.036, RSMo.

(1) Applicability.

(A) Except as outlined in paragraphs 1. and 2. of this subsection, this rule applies to the legal owner and operator of an aboveground storage tank, defined as any one (1) or a combination of tanks, including pipes connected thereto, used to contain an accumulation of petroleum and the volume of which, including the volume of the aboveground pipes connected thereto, is ninety percent (90%) or more above the surface of the ground, which is utilized for the sale of products regulated by Chapter 414, RSMo.

1. This rule does not apply to—

A. The owner or operator of an aboveground storage tank at a refinery, pipeline terminal, rail terminal, or marine terminal;

B. The owner or operator of an aboveground storage tank used for storing heating oil for consumptive use on the premises where stored; or

C. The owner or operator of an aboveground storage tank situated in an underground area, such as a basement, cellar, mineworking, drift, shaft, or tunnel, if the storage tank is situated upon or above the surface of the floor.

2. Aboveground storage tanks which meet the following criteria are deferred from complying with this rule as long as the owner of such tank(s) complies with all other applicable requirements of 2 CSR 90-30:

A. The tanks are in use at a single location;

B. The tank(s), piping, and dispensing equipment are aboveground and totally contained in a liquid-tight metal, concrete, or synthetic containment;

C. The aggregate capacity of the tank(s) located in the secondary containment is two thousand (2,000) gallons or less.

(B) Owners and operators of aboveground storage tanks which are in operation on or after January 1, 2011, are subject to this rule.

(C) If the owner and operator of an aboveground storage tank are separate persons, only one (1) person is required to demonstrate financial responsibility; however, both parties are liable in the event of noncompliance.

(2) Amount and Scope of Required Financial Responsibility.

(A) The owner or operator of an aboveground storage tank (AST) shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and/or property damage caused by sudden and non-sudden accidental releases arising from the operation of the AST in at least the following amounts:

1. One (1) million dollars per occurrence; and

2. Two (2) million dollars annual aggregate.

(B) This rule shall not serve to limit the liability of the owner or operator.

(3) Allowable Mechanisms.

(A) An owner or operator may use any one (1) or a combination of the following mechanisms to meet the requirements of this rule, provided that the total scope and amounts meet the requirements of this rule:

1. Self-insurance, subject to the requirements on subsection (B) of this section;

2. The Missouri Petroleum Storage Tank Insurance Fund;

3. An insurance policy issued by a commercial insurance company or a risk retention group, subject to the requirements in subsection (C) of this section.

(B) Requirements for Self-Insurance—An owner or operator must have a tangible net worth of at least ten (10) million dollars, per audited year-end financial statements for the latest completed fiscal year or per financial statements filed with the U.S. Securities and Exchange Commission for the latest completed fiscal year.

(C) Requirements for Insurance or Risk Retention Group Coverage.

1. An owner or operator may satisfy the financial responsibility requirements of this rule by obtaining liability insurance from a qualified insurer or risk retention group. This insurance may be in the form of a separate insurance policy or an endorsement to an existing insurance policy.

2. The endorsement or policy must provide coverage for claims otherwise covered by the policy that are reported to the insurer or risk retention group within six (6) months of the effective date of cancellation or non-renewal of the policy except where the new or renewed policy has the same retroactive date or retroactive date earlier than that of the prior policy and which arise out of any covered occurrence that commenced after the policy retroactive date, if applicable and prior to such policy renewal or termination date.

3. The endorsement or policy shall be issued by an insurer or risk retention group that, at a minimum, is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in this state.

(4) Cancellation or Nonrenewal by a Provider of Financial Assurance.

(A) Except as otherwise provided, a provider of financial assurance may cancel or fail to renew an assurance mechanism by sending a notice of termination by certified mail to the owner or operator. Notice of termination shall comply with the following requirement:

1. Termination of insurance or risk retention group coverage, except for nonpayment or misrepresentation by the insured, shall not occur until sixty (60) days after the date on which the notice is mailed. Termination for nonpayment of premium or misrepresentation by the insured may not occur until a minimum of ten (10) days after the date on which the notice of termination is mailed.

(B) If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider, the owner or operator shall obtain alternate coverage within sixty (60) days after the date coverage cancels or does not renew. If the owner or operator fails to obtain alternate coverage within sixty (60) days, the owner or operator shall immediately notify the director of the Department of Agriculture by mail of the cancellation of coverage and shall submit—

1. The name and address of the provider of financial assurance; and

2. The effective date of termination.

(5) Reporting and Enforcement.

(A) Upon request, an owner or operator shall submit one (1) or more documents demonstrating compliance with this rule to the director of the Department of Agriculture.

(B) If an owner or operator fails to comply with this rule or fails to provide documents to the director demonstrating compliance, the

director may, at his sole discretion take enforcement action in accordance with section 414.152, RSMo.

AUTHORITY: section 414.036, RSMo Supp. 2010. Original rule filed Jan. 18, 2011.

PUBLIC COST: This proposed rule will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed rule will not cost private entities more than five hundred dollars ($500) in the aggregate.

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rule with the Missouri Department of Agriculture, Weights and Measures Division, PO Box 630, Jefferson City, MO 65102-0630. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**.*

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 4—Wildlife Code: General Provisions

PROPOSED AMENDMENT

3 CSR 10-4.135 Transportation. The commission proposes to amend section (2) of this rule.

PURPOSE: This amendment removes the reference to fur handlers which will no longer be relevant with the elimination of the Resident Fur Handlers Permit.

(2) In addition to personal transportation, legally possessed commercial fish, frogs, deer hides, squirrel and rabbit pelts, and furbearer pelts and carcasses may be shipped by mail, express and freight, when truly labeled with the names and addresses of shipper and addressee, shipper's permit number, or Telecheck confirmation number, as required, and the contents of each package. Wildlife breeders, taxidermists, fur dealers, **and** tanners*[, and fur handlers]* may ship according to regulations specifically provided for such permittees. Wildlife shall not be accepted for shipment unless the shipper shall have complied with the provisions of this rule.

*AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed Aug. 14, 1970, effective Dec. 31, 1970. For intervening history, please consult the **Code of State Regulations**. Amended: Filed Jan. 4, 2011.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 5—Wildlife Code: Permits

PROPOSED AMENDMENT

3 CSR 10-5.215 Permits and Privileges: How Obtained; Not Transferable. The commission proposes to amend section (5) of this rule.

PURPOSE: This amendment removes reference to the Resident Fur Handlers Permit and clarifies methods of obtaining permits, restrictions on use, obligations, and validity taking into consideration the availability of ePermits.

(5) Permits are nontransferable and are valid from date of purchase through the last day of February of the prescribed permit year; except the Migratory Bird Hunting Permit, the Resident Trapping Permit, *[the Resident Fur Handler Permit,]* and the Nonresident Furbearer Hunting and Trapping Permit shall be valid through June 30. Except as provided for permits purchased by telephone *[or through the Internet]*, no affidavit, receipt, or other document may be issued or used in lieu of the required permit. Temporary permit authorization number(s) allowing immediate use of permit privileges may be provided for permits (except deer and turkey permits) purchased through the department's authorized telephone *[or Internet]* sales service provider. The temporary permit authorization number(s) and picture identification must be carried at all times while hunting, fishing**,** or trapping until the actual permit(s) is received. Any permit issued or obtained by false statement or through fraud, or while privileges are revoked or denied by the commission, shall be invalid.

*AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed July 22, 1974, effective Dec. 31, 1974. For intervening history, please consult the **Code of State Regulations**. Amended: Filed Jan. 4, 2011.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 7—Wildlife Code: Hunting: Seasons, Methods, Limits

PROPOSED AMENDMENT

3 CSR 10-7.450 Furbearers: Hunting Seasons, Methods. The commission proposes to amend sections (1) and (2) of this rule.

PURPOSE: This amendment allows possession, transportation, and sale of furs throughout the year if the taker holds a permit that includes small game hunting privileges. In addition, it corrects an error in the code for the registration or tagging deadline for bobcats.

(1) Badger, bobcat, gray fox, opossum, raccoon, red fox, and striped skunk may be taken in any numbers by hunting from November 15 through January 31. Pelts of furbearers may be possessed, transported, consigned for processing**,** and sold only by the taker *[from November 15 through February 15, (except as provided in 3 CSR 10-10.711)]* **with a valid permit throughout the year**, except that bobcats or their pelts shall be delivered by the taker to an agent of the department for registration or tagging before selling, transferring, tanning**,** or mounting, but not later than *[February 15]* **April 10**. Furbearers may be purchased and sold only under provisions of this rule, Chapter 10, and 3 CSR 10-4.135. No person shall accept payment for furbearers taken by another.

(2) Tagged bobcats or their pelts may be possessed by the taker throughout the year*[,]* and may be sold only to a licensed taxidermist, tanner**,** or fur dealer as provided in Chapter 10. It shall be illegal to purchase or sell untagged bobcats or their pelts. *[Other pelts may be delivered or shipped and consigned by the taker to a licensed taxidermist or tanner before the close of the possession season for pelts. These pelts must be recorded by the taxidermist or tanner and shall not enter the raw fur market.]* After tanning, pelts may be possessed, bought**,** or sold without permit. Skinned carcasses of legally taken furbearers may be sold by the taker throughout the year.

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed Aug. 16, 1972, effective Dec. 31, 1972. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Jan. 4, 2011.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the ***Missouri Register****. No public hearing is scheduled.*

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 8—Wildlife Code: Trapping: Seasons, Methods

PROPOSED AMENDMENT

3 CSR 10-8.515 Furbearers: Trapping Seasons. The commission proposes to amend section (2) of this rule.

PURPOSE: This amendment allows possession, transportation, and sale of furs throughout the year.

(2) *[Except as provided in 3 CSR 10-10.711, p]***P**elts of furbearers may be possessed, transported, consigned for processing, and sold only by the taker *[from November 15 through February 15, pelts of beaver, otters, muskrats, and nutria may be possessed, transported, consigned for processing, and sold by the taker from November 15 through April 10, and tagged bobcats and otters or their pelts may be possessed and sold throughout the year]* **with a valid permit throughout the year**. Bobcats and otters or their pelts shall be delivered by the taker to an agent of the department for registration or tagging. Bobcats and otters shall be registered or tagged before selling, transferring, tanning, or mounting not later than April 10. It shall be illegal to purchase or sell untagged bobcats and otters or their pelts. *[Other pelts may be delivered or shipped and consigned by the taker to a licensed taxidermist or tanner before the close of the possession season for pelts. These pelts must be recorded by the taxidermist or tanner and shall not enter the raw fur market.]* After tanning, pelts may be possessed, bought, or sold without permit. Skinned carcasses of legally taken furbearers may be sold by the taker throughout the year. (Certain Department of Health and Senior Services**'** rules also govern how furbearer carcasses might be utilized.)

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed July 23, 1974, effective Dec. 31, 1974. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Jan. 4, 2011.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be received within thirty (30) days after publication of this notice in the ***Missouri Register****. No public hearing is scheduled.*

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 10—Wildlife Code: Commercial Permits: Seasons, Methods, Limits

PROPOSED RESCISSION

3 CSR 10-10.711 Resident Fur Handlers Permit. This rule established a new permit that provides for an extended possession period for hunters and trappers to hold and process raw furs intended for shipment to established fur auction sites or to licensed fur dealers through June 1.

PURPOSE: This rule is being rescinded as the requirement for the Resident Fur Handlers Permit is no longer needed.

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. and section 252.240, RSMo 2000. Original rule filed Oct. 13, 2005, effective March 30, 2006. Amended: Filed Sept. 27, 2007, effective Feb. 29, 2008. Rescinded: Filed Jan. 4, 2011.

PUBLIC COST: This proposed rescission will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed rescission will not cost private entities more than five hundred dollars ($500) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rescission with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180. To be considered, comments must be

*received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*

Title 3—DEPARTMENT OF CONSERVATION
Division 10—Conservation Commission
Chapter 10—Wildlife Code: Commercial Permits: Seasons, Methods, Limits

PROPOSED RESCISSION

3 CSR 10-10.716 Resident Fur Handlers: Reports, Requirements. This rule established the requirements and reporting procedures required by the holder of the Resident Fur Handlers Permit.

PURPOSE: This rule is being rescinded as the requirement for the Resident Fur Handlers Permits is being rescinded and the reports and requirements are no longer needed.

AUTHORITY: sections 40 and 45 of Art. IV, Mo. Const. Original rule filed Oct. 13, 2005, effective March 30, 2006. Amended: Filed Oct. 10, 2008, effective April 30, 2009. Rescinded: Filed Jan. 4, 20I1.

PUBLIC COST: This proposed rescission will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed rescission will not cost private entities more than five hundred dollars ($500) in the aggregate.

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed rescission with Tom A. Draper, Deputy Director, Department of Conservation, PO Box 180, Jefferson City, MO 65I02-0I80. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*

Due to extreme weather conditions, the public hearing for rules 10 CSR 10-5.330, 10 CSR 10-5.340, 10 CSR 10-5.442, 10 CSR 10-5.455, 10 CSR 10-6.020, 10 CSR 10-6.060, 10 CSR 10-6.065, and 10 CSR 10-6.200, scheduled for February 3, 2011, had to be canceled and rescheduled. This also resulted in an extension of the end of the public comment period. These rules are being republished in the *Missouri Register* to give adequate notice for the new public hearing date and end of public comment.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 5—Air Quality Standards and Air Pollution Control Rules Specific to the St. Louis Metropolitan Area

PROPOSED AMENDMENT

10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations. The commission proposes to amend the rule purpose; amend section (1); delete current sections (3), (4), and (5); add new sections (3), (4), and (5); and delete sections (6) and (7). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule restricts the emissions of volatile organic compounds from industrial surface coating operations. This amendment will exempt facilities that are regulated under other rules that limit emissions of volatile organic compounds and will incorporate changes in Reasonably Available Control Technology (RACT) for surface coating operations to be consistent with the current federal RACT guidance documents. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the U.S. Environmental Protection Agency 2006–2008 Control Techniques Guidelines for surface coating operations, a petition from The Boeing Company to amend the rule, and Clean Air Act section 182(b)(2).

*PURPOSE: This rule restricts **the emissions of** volatile organic compounds from industrial surface coating operations.*

(1) Applicability.

(A) This rule shall apply throughout St. Louis City and Jefferson, St. Charles, Franklin**,** and St. Louis Counties.

(B) This rule shall apply to any installation with actual emissions of greater than *[two and one-half (2 1/2)]* **three (3)** tons in any calendar year *[after December 1, 1989,]* of volatile organic compounds (VOCs) from surface coating operations**, including related cleaning activities,** covered under this rule. *[This includes any installation which does not have an allowable VOC emission limit established under 10 CSR 10-6.060 or legally enforceable state implementation plan revision, which has actual VOC emissions of greater than two and one-half (2 1/2) tons in any calendar year after December 1, 1989. Once a source is determined to exceed the applicability level of this rule, it shall remain subject to this rule even if its actual emissions drop below the applicability level.]* **The installation shall not consider the effects of controls when calculating the applicable level of three (3) tons of actual VOC emissions.**

(C) This rule is *[not applicable to the surface coating of the following metal parts and products:]* **only applicable to the surface coating of manufactured items intended for distribution in commerce to persons other than the person or legal entity performing the surface coating.**

[1. Automobile refinishing;

2. Customizing top coating of automobiles and trucks, if production is less than thirty-five (35) vehicles per day; and

3. Exterior of marine vessels.]

(D) Exemptions. This rule is not applicable to the following:

1. Motor vehicle refinishing;

2. Customizing top coating of motor vehicles, if production is less than thirty-five (35) vehicles per day;

3. Surface coating of the exterior of marine vessels except for pleasure craft;

4. Surface coating that is part of janitorial, building, and installation maintenance operations;

5. Research and development, performance testing, and quality control of coatings and surface coated products;

6. Aerosol coatings;

7. Field application of architectural coatings to buildings, building components, and stationary structures;

8. Powder coatings;

9. Surface coating and cleaning of aerospace vehicles or components at an aerospace manufacture or rework installation that—

A. Is subject to the requirements and/or aerospace-specific exemptions of 10 CSR 10-5.295; or

B. Is not subject to 10 CSR 10-5.295 because the installation's potential to emit volatile organic compounds from aerospace surface coating and cleaning is twenty-five (25) tons per year or less;

10. Surface coating and cleaning of wood furniture or wood furniture components at a wood furniture manufacturing installation that—

A. Is subject to the requirements and/or wood furniture-specific exemptions of 10 CSR 10-5.530; or

B. Is not subject to 10 CSR 10-5.530 because the installation's potential to emit volatile organic compounds from wood furniture coating and cleaning is less than twenty-five (25) tons per year;

11. Surface coating and cleaning operations that are subject to a Reasonably Available Control Technology determination under 10 CSR 10-5.520;

12. Application and storage of traffic coatings that are subject to the requirements of 10 CSR 10-5.450;

13. Printing operations that are subject to the requirements of 10 CSR 10-5.340 or 10 CSR 10-5.442;

14. Surface coating and cleaning of articles used for internal company operations, including, but not limited to, work stands; scaffolding; jigs; tooling; dollies; tow bars; aircraft ground support equipment; portable equipment used for maintenance, testing, fabrication, or repair; toolboxes; storage bins; shelving; and other manufacturing or warehouse support items;

15. Surface coating operations which do not have a VOC limit in section (3) of this rule;

16. Adhesives and sealants that contain less than 0.17 pounds of VOC per gallon of coating (less water and exempt compounds) as applied;

17. Cyanoacrylate adhesives;

18. Adhesives, sealants, adhesive primers, and sealant primers that are supplied by the manufacturer or supplier in containers with a net volume of sixteen (16) fluid ounces or less, or a net weight of one (1) pound or less, except plastic cement welding adhesives and contact adhesives;

19. Contact adhesives that are supplied by the manufacturer or supplier in containers with a net volume of one (1) gallon or less; and

20. Adhesives, sealants, adhesive primers, sealant primers, surface preparation, and cleanup solvents that are used in the following operations:

A. Tire repair operations, provided the adhesive is labeled for tire repair only;

B. Assembly, repair, and manufacture of aerospace or undersea-based weapon systems;

C. Solvent welding operations used in the manufacture of medical devices or in the manufacture of medical equipment; and

D. Plaque laminating operations in which adhesives are used to bond clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992.

(E) Once an installation exceeds the applicability level of this rule, it shall remain subject to this rule until it can demonstrate, to the satisfaction of the director, that the actual total VOC emissions from surface coating operations, including related cleaning activities, is below three (3) tons per year for five (5) consecutive calendar years.

[(3) General Provisions. No person shall emit to the atmosphere any VOC from any surface coating operation in excess of the amount allowed in section (4). A surface coating operation includes an application area(s), flashoff area(s), oven(s) and any other functional area needed to complete a coating.

(4) Tables of Emission Limitations and Dates of Compliance.

(A) Table A: VOC Emission Limits Based on Solids Applied.

Operations Surface Coating	*Emission Limit lbs. VOC/gal. Solids Applied*	*Dates of Compliance*
Auto/light duty truck		
Topcoat	*15.1*	*12/1/89*
Spray Prime or Primer Surfacer	*15.1*	*12/1/89*

(B) Table B: VOC Emission Limits Based on Weight of VOC per Gallon of Coating (minus water and non-VOC organic compounds).

Surface Coatings Operations	*Emission Limit lbs. VOC/gal. Coating (less water & non-VOC organic compounds)*	*Dates of Compliance (See Note)*
Large Appliance		
Topcoat	*2.8*	*12/31/81*
Final Repair	*6.5*	*12/31/81*
Magnet Wire	*1.7*	*12/31/81*
Metal Furniture	*3.0*	*12/31/81*
Auto/Light Duty Truck		
Chrysler Motor Co. (Car)		
Prime-Electrocoat	*1.2*	*12/31/85*
Spray Prime	*4.2*	*12/31/79*
	3.4	*12/31/83*
	2.8	*12/31/85*
Topcoat	*3.9*	*12/31/79*
	3.0	*12/31/84*
	2.5	*12/31/85*
Final Repair	*4.8*	*12/31/81*
Miscellaneous Metal Parts Extreme Performance and Air Dried Coatings	*3.5*	*12/31/82*
All Other Coatings	*3.0*	*12/31/82*
Chrysler Motor Co. (Truck)		
Prime-Electrocoat	*1.2*	*12/31/84*
Spray Prime	*4.4*	*12/31/79*
	3.4	*12/31/82*
	2.8	*12/31/84*
Topcoat	*3.9*	*12/31/79*
	2.5	*12/31/84*
Final Repair	*4.8*	*12/31/84*
Miscellaneous Metal Parts Extreme Performance and Air Dried Coatings	*3.5*	*12/31/82*
All Other Coatings	*3.0*	*12/31/82*
Ford Motor Company		
Prime-Electrocoat	*1.2*	*12/31/82*
Spray Prime	*3.2*	*12/31/83*
Topcoat	*3.6*	*12/31/84*
Final Repair	*4.8*	*12/31/84*
Miscellaneous Metal Parts Extreme Performance and Air Dried Coatings	*3.5*	*12/31/82*
All Other Coatings	*3.0*	*12/31/82*
General Motors Company		
Cathodic Electrocoat	*1.2*	*12/31/82*
Primer Surfacer	*3.0*	*12/31/82*
	2.8	*12/31/84*

Topcoat	5.8	12/31/79
	5.0	12/31/81
	2.8	12/31/84
Final Repair	6.5	7/1/79
	4.8	12/31/84
Miscellaneous Metal Parts		
Extreme Performance and Air Dried Coatings	3.5	12/31/82
All Other Coatings	3.0	12/31/82
Paper	2.9	12/31/81
Vinyl	3.8	12/31/81
Fabric	2.9	12/31/81
Coil	2.6	12/31/81
Can		
2 Piece Exterior Sheet	4.0	12/31/82
Basecoat	2.8	12/31/85
2 and 3 Piece Interior Body Spray	4.2	12/31/82
2 Piece End Exterior	4.2	12/31/82
3 Piece Side Seam	5.5	12/31/82
End Seal Compound	4.2	12/31/82
	3.7	12/31/85
Railroad Cars, Farm Implements and Machinery, and Heavy Duty Trucks	3.5	12/31/82
Other Metal Parts		
Clear Coat	4.3	12/31/82
Extreme Performance and Air Dried Coatings	3.5	12/31/82
All Other Coatings	3.0	12/31/82
Plastic Parts	3.5	4/11/84
Mail Boxes and Shutters	3.5	4/11/85

Note: The emission limit associated with the latest compliance date for each surface coating process supersedes interim emission limits associated with earlier compliance dates. No coating operation shall have emission limits from Tables A and B that apply at the same time.

(5) Determination of Compliance. Compliance with section (4) of this rule shall be determined by one (1) of the following methods specified in subsections (5)(A) and (B) as applicable and appropriate:

(A) For subsection (4)(A), Table A, the calculation of daily volume-weighted emission performance for automobile and light duty truck primer surfacer and topcoat operations shall be made according to procedures detailed in the United States Environmental Protection Agency (EPA) document entitled "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations" (U.S. EPA-450/3-88-018) dated December, 1988; and

(B) For subsection (4)(B), Table B—

1. Compliance with the emission limits may be determined using the method referenced in 10 CSR 10-6.030(14)(C) using the one (1)-hour bake. Emission performance shall be on the basis of a daily volume-weighted average of all coatings used in each surface coating operation as delivered to the coating applicator(s) on a coating line. The daily volume-weighted average ($DAVG_{vw}$) shall be calculated by the following formula:

$$DAVG_{vw} = \frac{\sum_{i=1}^{n} (A_i \times B_i)}{C}$$

Where:
A = daily gal. each coating used (minus water and exempt solvents) in a surface coating operation;
B = lbs. VOC/gal. coating (minus water and exempt solvents);
C = total daily gal. coatings used (minus water and exempt solvents) in a surface coating operation; and
N = number of coatings used in a surface coating operation;

2. Compliance with the emission limits in subsection (4)(B), Table B may be determined on a pounds of VOC per gallon of coating solids basis. The determination is made by first converting the emission limit in subsection (4)(B), Table B to pounds of VOC per gallon of coating solids as shown in the following three (3) steps:

$$1)\ \frac{\text{lbs. VOC per gallon of coating (emission limit minus water from (4)(B))}}{\text{7.36 lbs. per gallon (average density of solvents used to originally establish the emission limit)}} = \text{Volume fraction of VOC}$$

$$2)\ 1 - \text{Volume fraction of VOC} = \text{Volume fraction solids}$$

$$3)\ \frac{\text{lbs. VOC per gallon of coating (emission limit minus water from (4)(B))}}{\text{Volume fraction of solids}} = \text{lbs. VOC gallons of coating solids}$$

This value from step 3) is the new emission limit. It is equivalent to the emission limit in subsection (4)(B) on a coating solids basis. The VOC per gallon of coating solids for each coating solids used is then determined using the method referenced in 10 CSR 10-6.030(14)(C) using the one (1)-hour bake. The composite daily weighted average of pounds of VOC per gallon of coating solids as tested for in the actual coatings used is compared to the new emission limit. Source operations on a coating line using coatings with a composite actual daily weighted average value less than or equal to the new emission limit, are in compliance with this rule; or

3. Compliance with the emission limits in subsection (4)(B), Table B may be determined on a pounds of VOC per gallon of coating solids applied basis. An owner or operator may request his/her emission limit be modified to be equivalent to the emission limit in subsection (4)(B), but in emission units of pounds of VOC emitted per gallon of coating solids applied. This new emission limit is derived by dividing the emission limit from paragraph (5)(B)2. by an appropriate value for transfer efficiency (TE) as determined by the director. Prior to this determination, the owner or operator shall demonstrate to the satisfaction of the director that an adequate, fully replicable TE test method exists for the source operation. Upon approval of the TE demonstration, the director will develop an emission limit equivalent to the applicable emission limit in subsection (4)(B).

(6) Record Keeping.

(A) The owner or operator of a coating line shall keep records detailing specific VOC sources as necessary for the director to determine daily compliance. These may include:

1. Daily records of the type and the quantity of coatings used daily;

2. The coating manufacturer's formulation data for each coating on forms provided or approved by the director;

3. Daily records of the type and quantity of solvents for coating, thinning, purging and equipment cleaning used;

4. All test results to determine capture and control efficiencies, TEs and coating makeup;

5. Daily records of the type and quantity of waste solvents reclaimed or discarded daily;

6. Daily records of the quantity of pieces or materials coated daily; and

7. Any additional information pertinent to determining compliance.

(B) Records such as daily production rates may be substituted for actual daily coating use measurements provided the owner submits a demonstration approved by the director that these records are adequate for the purposes of this rule.

(C) Records required under subsections (6)(A) and (B) shall be retained by the owner or operator for a minimum of two (2) years. These records shall be made available to the director upon request.

(7) Compliance Schedules.

(A) Owners or operators who were subject to this rule prior to December 1, 1989 shall be subject to the compliance dates set forth in section (4). Record keeping systems required of these owners or operators under section (6) shall be in place and functioning not later than April 1, 1990. All other subject owners or operators shall be in compliance and have all record keeping systems in place by December 1, 1990.

(B) Owners or operators subject to this rule, but operating under alternate compliance plans as allowed prior to December 1, 1989, shall submit documentation by March 1, 1990 that their controls represent compliance with this rule. If the director determines that the documentation represents compliance, the director shall propose to the Missouri Air Conservation Commission subsequent rules' amendments to make those control measures enforceable. If documentation is not submitted or if the director determines the documentation does not represent compliance, the owner or operator shall comply with section (4) of this rule. All owners or operators subject to this subsection shall demonstrate compliance by December 1, 1990.]

(3) General Provisions. General provisions for specific coatings may be found in the following subsections of section (3) of this rule:

Coating	Subsection
Large Appliance Coatings	(3)(A)
Metal Furniture Coatings	(3)(B)
Automobile and Light Duty Truck Assembly Coatings	(3)(C)
Paper, Film, and Foil Coatings	(3)(D)
Magnet Wire Coatings	(3)(E)
Coil Coatings	(3)(F)
Can Coatings	(3)(G)
Vinyl and Fabric Coatings	(3)(H)
Flat Wood Paneling Coatings	(3)(I)
Miscellaneous Metal and Plastic Parts Coatings	(3)(J)
Industrial Adhesive Application	(3)(K)

(A) Large Appliance Coatings.

1. The requirements in this subsection apply to the surface coating of doors, cases, lids, panels, and interior support parts of the following residential and commercial products:

A. Washers;
B. Dryers;
C. Ranges;
D. Refrigerators;
E. Freezers;
F. Water heaters;
G. Dishwashers;
H. Trash compactors;
I. Air conditioners; and
J. Other similar products.

2. Emission limits.

A. Prior to September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Large Appliance Coatings	
Coating Category	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
Topcoat	2.8
Final Repair	6.5

B. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Large Appliance Coatings		
	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)	
Coating Category	Baked	Air Dried
General, One Component	2.3	2.3
General, Multi Component	2.3	2.8
Extreme High Gloss	3.0	2.8
Extreme Performance	3.0	3.5
Heat Resistant	3.0	3.5
Metallic	3.5	3.5
Pretreatment Coatings	3.5	3.5
Solar Absorbent	3.0	3.5
Repair and Touch Up	6.5	6.5

3. Method and determination of compliance. The emission limits in paragraph (3)(A)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limits in paragraph (3)(A)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

4. Application equipment. On or after September 1, 2011, one (1) or a combination of the following equipment shall be used for coating application, unless achieving compliance by using an add-on control system per subparagraph (3)(A)3.C. of this rule:

A. Electrostatic equipment;
B. High-volume low-pressure (HVLP) spray equipment;
C. Flow coating;
D. Roller coating;
E. Dip coating, including electrodeposition;
F. Airless spray;

G. Air-assisted airless spray; and

H. Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

5. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:

A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

B. Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;

C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

D. Clean up spills immediately;

E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and

F. Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

6. The VOC limits in paragraph (3)(A)2. of this rule do not apply to the following types of coatings and coating operations:

A. Stencil coatings;

B. Safety-indicating coatings;

C. Solid film lubricants; or

D. Electric-insulating and thermal-conducting coatings.

(B) Metal Furniture Coatings.

1. The requirements in this subsection apply to surface coating of any furniture made of metal or any metal part that will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece.

2. Emission limits.

A. Prior to September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of three (3.0) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).

B. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Metal Furniture Coatings		
	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)	
Coating Category	Baked	Air Dried
General, One Component	2.3	2.3
General, Multi Component	2.3	2.8
Extreme High Gloss	3.0	2.8
Extreme Performance	3.0	3.5
Heat Resistant	3.0	3.5
Metallic	3.5	3.5
Pretreatment Coatings	3.5	3.5
Solar Absorbent	3.0	3.5

3. Method and determination of compliance. The emission limits in paragraph (3)(B)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limits in paragraph (3)(B)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

4. Application equipment. On or after September 1, 2011, one (1) or a combination of the following equipment shall be used for coating application, unless achieving compliance by using an add-on control system per subparagraph (3)(B)3.C. of this rule:

A. Electrostatic equipment;

B. HVLP spray equipment;

C. Flow coating;

D. Roller coating;

E. Dip coating, including electrodeposition;

F. Airless spray;

G. Air-assisted airless spray; and

H. Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

5. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:

A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;

C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

D. Clean up spills immediately;

E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and

F. Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

6. The VOC limits in paragraph (3)(B)2. of this rule do not apply to the following types of coatings and coating operations:

A. Stencil coatings;

B. Safety-indicating coatings;

C. Solid film lubricants; and

D. Electric-insulating and thermal-conducting coatings.

(C) Automobile and Light Duty Truck Assembly Coatings.

1. The requirements in this subsection apply to automobile and light duty truck surface coating operations performed in an automobile or light duty truck assembly installation.

2. Emission limits.

A. Prior to September 1, 2011, no owner or operator of an automobile or light duty truck assembly installation may cause, allow, or permit the discharge into the ambient air of any VOC in excess of the following:

Automobile and Light Duty Truck Assembly Coatings	
Coating Category	Emission Limit
Topcoat	15.1 pounds of VOC per gallon of coating solids deposited
Spray Primer or Primer Surfacer	15.1 pounds of VOC per gallon of coating solids deposited
Electrodeposition Primer	1.4 pounds of VOC per gallon of coating solids deposited
Final Repair	4.8 pounds of VOC per gallon of coating (minus water and exempt compounds)
Miscellaneous Metal Parts, Extreme Performance, and Air Dried Coatings	3.5 pounds of VOC per gallon of coating (minus water and exempt compounds)
All Other Coatings	3.0 pounds of VOC per gallon of coating (minus water and exempt compounds)

B. On or after September 1, 2011, no owner or operator of an automobile or light duty truck assembly installation may cause, allow, or permit the discharge into the ambient air of any VOC in excess of the following:

Automobile and Light Duty Truck Assembly Coatings			
Coating Category	Emission Limit		
	$R_T < 0.040$	$0.040 \le R_T < 0.160$	$R_T \ge 0.160$
Electrodeposition primer (EDP)	No VOC Emission Limit	$0.7 \times 350^{0.160-R_T}$ pounds of VOC per gallon of coating solids deposited	0.7 pounds of VOC per gallon of coating solids deposited
Primer-surfacer	12.0 pounds of VOC per gallon of coating solids deposited		
Topcoat	12.0 pounds of VOC per gallon of coating solids deposited		
Combined Primer-Surfacer and Topcoat	12.0 pounds of VOC per gallon of coating solids deposited		
Final repair	4.8 pounds of VOC per gallon of coating (minus water and exempt compounds)		

Miscellaneous Materials	
Material	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
Automobile and light duty truck glass bonding primer	7.5
Automobile and light duty truck adhesive	2.1
Automobile and light duty truck cavity wax	5.4
Automobile and light duty truck sealer	5.4
Automobile and light duty truck deadener	5.4
Automobile and light duty truck gasket/gasket-sealing material	1.7
Automobile and light duty truck underbody coating	5.4
Automobile and light duty truck trunk interior coating	5.4
Automobile and light duty truck bedliner	1.7
Automobile and light duty truck weatherstrip adhesive	6.3
Automobile and light duty truck lubricating wax/compound	5.8

3. Method and determination of compliance. The emission limits in paragraph (3)(C)2. of this rule shall be achieved through the following:

A. Spray primer; primer-surfacer; topcoat; and combined primer-surfacer and topcoat. The VOC emission rate, expressed as pounds of VOC per gallon of coating solids deposited, is determined by the procedures in the U.S. Environmental Protection Agency (EPA) document *Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations* (EPA-453/R-08-002), dated September 2008. The surface coating unit is in compliance if the emission rate is less than or equal to the emission limit in paragraph (3)(C)2. of this rule;

B. Electrodeposition primer (EDP). Determine the monthly volume-weighted average VOC emission rate of the EDP coating unit, expressed as pounds of VOC per gallon of coating solids deposited, per subparagraph (5)(C)3.D. of this rule. The EDP coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(C)2. of this rule;

C. Final repair coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limits in paragraph (3)(C)2. of this rule; and

D. All other coatings. Determine the monthly volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.E. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(C)2. of this rule.

4. Work practices and work practice plan.

A. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:

(I) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

(II) Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;

(III) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

(IV) Clean up spills immediately;

(V) Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and

(VI) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

B. Work practice plan. Installations subject to subparagraph (3)(C)4.A. of this rule shall develop and implement a work practice plan to minimize VOC emissions from cleaning and purging of equipment associated with all coating operations for which emission limits are specified in paragraph (3)(C)2. of this rule. The plan shall specify practices and procedures to ensure that VOC emissions from the following operations are minimized:

(I) Vehicle body wiping;

(II) Coating line purging;

(III) Flushing of coating systems;

(IV) Cleaning of spray booth grates;

(V) Cleaning of spray booth walls;

(VI) Cleaning of spray booth equipment;

(VII) Cleaning external spray booth areas; and

(VIII) Other housekeeping measures, such as keeping solvent-laden rags in closed containers.

(D) Paper, Film, and Foil Coatings.

1. The requirements in this subsection apply to paper, film, and foil coating operations, with the exception of the following:

A. Paper, film, and foil surface coating units with potential to emit below twenty-five (25) tons per year of VOC from coating, prior to controls;

B. Coating performed on or in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing press that is part of a printing process; and

C. Size presses and on-machine coaters on papermaking machines that apply sizing or water-based clays.

2. Emission limits.

A. Prior to September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of two and nine-tenths (2.9) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).

B. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Paper, Film, and Foil Coatings	
Coating Category	Emission Limit pounds of VOC per pound of coating solids
Pressure sensitive tape and label	0.2
Paper, film, and foil surface coating (not including pressure sensitive tape and label)	0.4

3. Method and determination of compliance. The emission limits in paragraph (3)(D)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings.

(I) Prior to September 1, 2011. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(D)2. of this rule.

(II) On or after September 1, 2011. Determine the daily mass-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per pound of coating solids per subparagraph (5)(C)3.C. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limits in paragraph (3)(D)2. of this rule; or

B. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

4. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:

A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;

C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

D. Clean up spills immediately;

E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and

F. Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(E) Magnet Wire Coatings.

1. The requirements in this subsection apply to the coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

2. Emission limits. No owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of one and seven-tenths (1.7) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).

3. Method and determination of compliance. The emission limits in paragraph (3)(E)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(E)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

(F) Coil Coatings.

1. The requirements in this subsection apply to the surface coating of any flat metal sheet or strip that comes in rolls or coils.

2. Emission limits. No owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of two and six-tenths (2.6) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).

3. Method and determination of compliance. The emission limits in paragraph (3)(F)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(F)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

(G) Can Coatings.

1. The requirements in this subsection apply to the surface coating of cans.

2. Emission limits. No owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the

discharge into the ambient air of any volatile organic compounds, as delivered to the coating applicator(s), in excess of the following:

Can Coatings	
Coating Category	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
2-Piece Exterior Sheet Basecoat	2.8
2- and 3-Piece Interior Body Spray	4.2
2-Piece End Exterior	4.2
3-Piece Side Seam	5.5
End Seal Compound	3.7

3. Method and determination of compliance. The emission limits in paragraph (3)(G)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(G)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

(H) Vinyl and Fabric Coatings.

1. The requirements in this subsection apply to vinyl coating and fabric coating.

2. Emission limits. No owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any volatile organic compounds, as delivered to the coating applicator(s), in excess of the following:

Vinyl and Fabric Coatings	
Coating Category	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
Vinyl	3.8
Fabric	2.9

3. Method and determination of compliance. The emission limits in paragraph (3)(H)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(H)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

(I) Flat Wood Paneling Coatings.

1. The requirements in this subsection apply to the coating of the following:

A. Printed interior panels made of hardwood plywood and thin particle board;

B. Natural finish hardwood plywood panels;

C. Hardboard paneling with Class II finishes;

D. Exterior siding; and

E. Tileboard.

2. Emission limits. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess two and one-tenths (2.1) pounds of VOC per gallon of coating (minus water and exempt compounds) as delivered to the coating applicator(s).

3. Method and determination of compliance. The emission limits in paragraph (3)(I)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(I)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

4. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:

A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;

C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

D. Clean up spills immediately;

E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and

F. Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(J) Miscellaneous Metal and Plastic Parts Coatings.

1. The requirements in this subsection apply to the surface coating of all other miscellaneous metal and plastic parts including, but not limited to, the following:

A. Large and small farm implements and machinery;

B. Railroad cars;

C. Small household appliances;

D. Office equipment;

E. Commercial and industrial machinery and equipment;

F. Any other industrial category that coats metal parts or products under the Standard Industrial Classification Code of major groups #33, #34, #35, #36, #37, #38, and #39;

G. Fabricated metal products;

H. Molded plastic parts;

I. Automotive or transportation equipment;
J. Interior or exterior automotive parts;
K. Construction equipment;
L. Motor vehicle accessories;
M. Bicycles and sporting goods;
N. Toys;
O. Recreational vehicles;
P. Pleasure craft (recreational boats);
Q. Extruded aluminum structural components;
R. Heavier vehicles;
S. Lawn and garden equipment;
T. Business machines;
U. Laboratory and medical equipment;
V. Electronic equipment;
W. Steel drums;
X. Metal pipes; and
Y. Prefabricated architectural components when the coating is applied in a surface coating unit as defined in subsection (2)(S).

2. Emission limits.

A. Prior to September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Coating Category	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
Metal Parts	
Clear Coat	4.3
Extreme Performance Coatings	3.5
Air Dried Coatings	3.5
All Other Coatings	3.0
Plastic Parts	3.5
Railroad Cars	3.5
Farm Implements and Machinery	3.5
Heavy Duty Trucks	3.5
Mail Boxes and Shutters	3.5

B. On or after September 1, 2011, no owner or operator of a surface coating unit subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Metal Parts and Products Coatings		
	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)	
Coating Category	Air Dried	Baked
General, One Component	2.8	2.3
General, Multi Component	2.8	2.3
Camouflage	3.5	3.5
Clear Coat	4.3	4.3
Electric-Insulating Varnish	3.5	3.5
Etching Filler	3.5	3.5
Extreme High Gloss	3.5	3.0
Extreme Performance	3.5	3.0
Heat Resistant	3.5	3.0
High Performance Architectural	6.2	6.2
High Temperature	3.5	3.5
Metallic	3.5	3.5
Military Specification	2.8	2.3
Mold Seal	3.5	3.5
Pan Backing	3.5	3.5
Prefabricated Architectural	3.5	2.3
Pretreatment Coatings	3.5	3.5
Repair and Touch Up	3.5	3.0
Silicone Release	3.5	3.5
Solar Absorbent	3.5	3.0
Vacuum Metalizing	3.5	3.5
Drum, New, Exterior	2.8	2.8
Drum, New, Interior	3.5	3.5
Drum, Reconditioned, Exterior	3.5	3.5
Drum, Reconditioned, Interior	4.2	4.2

Plastic Parts and Products Coatings	
Coating Category	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
Automotive/Transportation	
High Bake, Interior and Exterior Parts	
Flexible Primer	4.5
Non-Flexible Primer	3.5
Basecoat	4.3
Clear Coat	4.0
Non-Basecoat/Clear Coat	4.3
Low Bake/Air Dried, Exterior Parts	
Primer	4.8
Basecoat	5.0
Clear Coat	4.5
Non-Basecoat/Clear Coat	5.0
Low Bake/Air Dried, Interior Parts	5.0
Touch Up and Repair	5.2
Business Machine	
Primer	2.9
Topcoat	2.9
Texture Coat	2.9
Fog Coat	2.2
Touch Up and Repair	2.9
Plastic, All Other	
General, One Component	2.3
General, Multi Component	3.5
Electric Dissipating and Shock-Free	6.7
Extreme Performance	3.5
Metallic	3.5
Military Specification	
One (1) Pack	2.8
Two (2) Pack	3.5
Mold Seal	6.3
Multi Colored	5.7
Optical	6.7
Polyurethane Shoe Sole	6.7
Vacuum-Metalizing	6.7

Pleasure Craft Coatings	
Coating Category	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
Extreme High Gloss Topcoat	5.0
High Gloss Topcoat	3.5
Pretreatment Wash Primer	6.5
Finish Primer/Surfacer	3.5
High Build Primer/Surfacer	2.8
Aluminum Substrate Antifoulant	4.7
Other Substrate Antifoulant	2.8
Antifoulant Sealer/Tie	3.5
All Other	3.5

Motor Vehicle Materials	
Coating Category	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
Motor Vehicle Cavity Wax	5.4
Motor Vehicle Sealer	5.4
Motor Vehicle Deadener	5.4
Motor Vehicle Gasket/Gasket-Sealing Material	1.7
Motor Vehicle Underbody	5.4
Motor Vehicle Trunk Interior	5.4
Motor Vehicle Bedliner	1.7
Motor Vehicle Lubricating Wax/Compound	5.8

3. Method and determination of compliance. The emission limits in paragraph (3)(J)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), per subparagraph (5)(C)3.A. of this rule. The surface coating unit is in compliance if this value is less than or equal to the emission limit in paragraph (3)(J)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The surface coating unit is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be ninety percent (90%) or greater.

4. Application equipment. On or after September 1, 2011, one (1) or a combination of the following equipment shall be used for coating application, unless achieving compliance by using an add-on control device per subparagraph (3)(J)3.C. of this rule:

A. Electrostatic equipment;

B. HVLP spray equipment;

C. Flow coating;

D. Roller coating;

E. Dip coating, including electrodeposition;

F. Airless spray;

G. Air-assisted airless spray; and

H. Other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

5. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:

A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;

C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

D. Clean up spills immediately;

E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and

F. Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

6. For metal parts coatings, the VOC limits in paragraph (3)(J)2. of this rule do not apply to the following types of coatings and coating operations:

A. Stencil coatings;

B. Safety-indicating coatings;

C. Solid film lubricants;

D. Electric-insulating and thermal-conducting coatings;

E. Magnetic data storage disk coatings; and

F. Plastic extruded onto metal parts to form a coating.

7. For metal parts coatings, the application equipment requirements in paragraph (3)(J)4. of this rule do not apply to the following types of coatings and coating operations:

A. Touch-up coatings;

B. Repair coatings; and

C. Textured coatings.

8. For plastic parts coatings, the VOC limits in paragraph (3)(J)2. of this rule do not apply to the following types of coatings and coating operations:

A. Touch-up and repair coatings;

B. Stencil coatings applied on clear or transparent substrates;

C. Clear or translucent coatings;

D. Coatings applied at a paint manufacturing installation while conducting performance tests on the coatings;

E. Any individual coating category used in volumes less than fifty (50) gallons in any one (1) year, if substitute compliant coatings are not available, provided that the total usage of all such coatings does not exceed two hundred (200) gallons per year, per installation;

F. Reflective coating applied to highway cones;

G. Mask coatings that are less than one-half (0.5) millimeter thick (dried) and the area coated is less than twenty-five (25) square inches;

H. Electromagnetic interference and radio frequency interference (EMI/RFI) shielding coatings; and

I. Heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed one hundred (100) gallons per year, per installation.

9. For plastic parts coatings, the application equipment requirements in paragraph (3)(J)4. of this rule do not apply to airbrush operations using five (5) gallons or less per year of coating.

10. For automobile, transportation, or business machine plastic parts coatings, the VOC limits in paragraph (3)(J)2. of this rule do not apply to the following types of coatings and coating operations:

A. Texture coatings;

B. Vacuum metalizing coatings;

C. Gloss reducers;

D. Texture adhesion primers;

E. Electrostatic preparation coatings;

F. Resist coatings; and

G. Stencil coatings.

11. For pleasure craft surface coating operations, the application equipment requirements in paragraph (3)(J)4. of this rule do not apply to extreme high gloss coatings.

12. The limits for military specification coatings in subparagraph (3)(J)2.B. of this rule do not apply to coatings that meet the following criteria:

A. The coating is applied to military equipment used for national defense;

B. The coating performance is critical to the successful operation of the military equipment;

C. The coating is mandated in a specification or contract and a substitution of coatings that meet the VOC limits in subparagraph (3)(J)2.B. of this rule is prohibited; and

D. The director grants approval for the use of the coating at the installation.

(K) Industrial Adhesive Application.

1. The requirements in this subsection apply to adhesive application processes.

2. Emission limits.

A. On or after September 1, 2011, no owner or operator of an adhesive application process subject to this subsection may cause, allow, or permit the discharge into the ambient air of any VOCs in excess of the following, as delivered to the coating applicator(s):

Category	Emission Limit pounds of VOC per gallon of coating (minus water and exempt compounds)
Adhesives Applied to the Specific Substrates	
Reinforced Plastic Composites	1.7
Flexible Vinyl	2.1
Metal	0.3
Porous Material (Except Wood)	1.0
Rubber	2.1
Wood	0.3
Other Substrates	2.1
Specialty Adhesive Application Processes	
Ceramic Tile Installation	1.1
Contact Adhesive	2.1
Cove Base Installation	1.3
Floor Covering Installation, Indoor	1.3
Floor Covering Installation, Outdoor	2.1
Floor Covering Installation, Perimeter Bonded Sheet Vinyl	5.5
Metal to Urethane/Rubber Molding or Casting	7.1
Motor Vehicle Adhesive	2.1
Motor Vehicle Weatherstrip Adhesive	6.3
Multipurpose Construction	1.7
Plastic Solvent Welding, ABS	3.3
Plastic Solvent Welding, Except ABS	4.2
Sheet Rubber Lining Installation	7.1
Single-Ply Roof Membrane Installation/Repair, Except EPDM Glue	2.1
Structural Glazing	0.8
Thin Metal Laminating	6.5
Tire Repair	0.8
Waterproof Resorcinol	1.4
Adhesive Primer Application Processes	
Motor Vehicle Glass Bonding Primer	7.5
Plastic Solvent Welding Adhesive Primer	5.4
Single-Ply Roof Membrane Adhesive Primer	2.1
Other Adhesive Primer	2.1

B. The VOC limits in subparagraph (3)(K)2.A. of this rule for adhesives or adhesive primers applied to particular substrates shall apply as follows:

(I) If an adhesive is subject to a specific VOC limit in subparagraph (3)(K)2.A., the specific limit is applicable rather than an adhesive-to-substrate limit; and

(II) When an adhesive is used to bond dissimilar substrates, the applicable substrate category with the highest VOC content shall be the limit.

3. Method and determination of compliance. The emission limits in paragraph (3)(K)2. of this rule shall be achieved through one (1) of the following:

A. VOC content of coatings. Determine the daily volume-weighted average VOC content of all coatings used in an adhesive application process, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) per subparagraph (5)(C)3.A. of this rule. The adhesive application process is in compliance if this value is less than or equal to the emission limits in paragraph (3)(K)2. of this rule;

B. Combination of VOC content of coatings and add-on controls. Calculate the required control system efficiency per paragraph (5)(C)4. of this rule. The adhesive application process is in compliance if the actual overall control system efficiency is greater than or equal to the required control system efficiency; or

C. Control system. If a control system is used to achieve compliance, the overall control system efficiency must be eighty-five percent (85%) or greater.

4. Application equipment. On or after September 1, 2011, one (1) or a combination of the following equipment shall be used for adhesive application, unless achieving compliance by using an add-on control device per subparagraph (3)(K)3.C. of this rule:

A. Electrostatic spray;

B. HVLP spray;

C. Flow coat;

D. Roller coat or hand application, including non-spray application methods similar to hand- or mechanically-powered caulking gun, brush, or direct-hand application;

E. Dip coat, including electrodeposition;

F. Airless spray;

G. Air-assisted airless spray; and

H. Other adhesive application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

5. Work practices. On or after September 1, 2011, work practices shall be used to minimize VOC emissions from solvent storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:

A. Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;

B. Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;

C. Minimize spills of VOC-containing coatings, thinners, and cleaning materials;

D. Clean up spills immediately;

E. Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and

F. Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(4) Reporting and Record Keeping.

(A) The owner or operator of a surface coating unit covered under this rule shall keep records as necessary to determine compliance. Records kept should be appropriate for the facility, their products, and operations. These may include, as applicable, one (1) or more of the following:

1. Current list of coatings used and the VOC content as applied;

2. Daily volume usage of each coating;

3. Records of the weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating VOC content or a combination of coating VOC content and control system;

4. Annual VOC emissions from surface coating equipment cleaning; and

5. All test results to determine capture efficiency, control efficiency, and coating properties.

(B) Records such as daily production rates may be substituted for actual daily coating use measurements provided the owner submits a demonstration, approved by the director, that these records are adequate for the purposes of this rule.

(C) Any owner or operator using an emission control device to achieve compliance shall maintain daily records of key system operating parameters for emission control equipment including, but not limited to:

1. Identification of the type of emissions control system used;

2. Hours of operation;

3. Routine and non-routine maintenance, including dates and duration of any outages;

4. Records of test reports conducted;

5. An owner or operator of a surface coating unit employing a thermal or catalytic oxidizer to achieve compliance shall comply with the following requirements:

A. Continuous temperature monitoring and recording equipment shall be installed and operated to accurately measure the operating temperature(s) for the control device; and

B. The following information shall be collected and recorded each day of operation of the surface coating unit and the control device:

(I) A log or record of the operating time for the control device, monitoring equipment, and the associated surface coating unit;

(II) For thermal oxidizers, all three (3)-hour periods of operation during which the average combustion temperature was more than fifty degrees Fahrenheit (50°F) below the average combustion temperature during the most recent emission test that demonstrated that the surface coating unit was in compliance; and

(III) For catalytic oxidizers, all three (3)-hour periods of operation during which the average temperature of the exhaust gases immediately before the catalyst bed was more than fifty degrees Fahrenheit (50°F) below the average temperature of the exhaust gases during the most recent emission test that demonstrated that the surface coating unit was in compliance, and all three (3)-hour periods during which the average temperature difference across the catalyst bed was less than eighty percent (80%) of the average temperature difference during the most recent emission test that demonstrated that the surface coating operation was in compliance; and

6. An owner or operator of a surface coating unit employing a carbon adsorption system to achieve compliance shall comply with the following requirements:

A. The following types of monitoring and recording equipment shall be installed and operated for the carbon adsorption system:

(I) A continuous emission monitoring and recording system that is capable of accurately measuring and recording the concentration of organic compounds in the exhaust gases from the carbon adsorption system;

(II) Monitoring and recording equipment that is capable of accurately measuring and recording the total mass steam flow rate for each regeneration cycle of each carbon bed; and

(III) Monitoring and recording equipment that is capable of accurately measuring and recording the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)); and

B. The following information shall be collected and recorded each day of operation of the surface coating unit and the carbon adsorption system:

(I) A log or record of the operating time for the carbon adsorption system, monitoring equipment, and the associated surface coating unit;

(II) For a carbon adsorption system that employs a continuous emission monitoring and recording system to measure and record the concentration of organic compounds in the exhaust gases, all three (3)-hour periods of operation during which the average concentration level or reading in the exhaust gases is more than twenty percent (20%) greater than the exhaust gas organic compound concentration level or reading measured by the most recent performance test that demonstrated that the surface coating unit was in compliance;

(III) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the total mass steam flow rate for each regeneration cycle of each carbon bed, all carbon bed regeneration cycles during which the total mass steam flow rate was more than ten percent (10%) below the total mass steam flow rate during the most recent performance test that demonstrated that the surface coating unit was in compliance; and

(IV) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)) was more than ten percent (10%) greater than the carbon bed temperature during the most recent performance test that demonstrated that the surface coating unit was in compliance.

(D) Records required under subsections (4)(A) through (4)(C) of this rule shall be retained by the owner or operator for a minimum of five (5) years. These records shall be made available to the director upon request.

(5) Test Methods.

(A) Test Methods for Control Systems. Owners or operators demonstrating compliance with the provisions of this rule via a control system shall determine the overall control system efficiency as the product of the capture efficiency and control device efficiency, using the following test methods:

1. The VOC concentration of gaseous air streams shall be determined with a test consisting of three (3) separate runs, each lasting a minimum of sixty (60) minutes using one (1) of the following methods as specified by 40 CFR 60, Appendix A—Reference Methods:

A. Method 18—Measurement of Gaseous Organic Compound Emissions by Gas Chromatography;

B. Method 25—Determination of Total Gaseous Nonmethane Organic Emissions as Carbon; or

C. Method 25A—Determination of Total Gaseous Organic Concentration Using Flame Ionization Analyzer;

2. Sample and velocity traverses shall be determined by using one (1) of the following methods as specified by 40 CFR 60, Appendix A—Reference Methods:

A. Method 1—Sample and Velocity Traverses for Stationary Sources; or

B. Method 1A—Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts;

3. Velocity and volumetric flow rates shall be determined by using one (1) of the following methods as specified by 40 CFR 60, Appendix A—Reference Methods:

A. Method 2—Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube);

B. Method 2A—Direct Measurement of Gas Volume Through Pipes and Small Ducts;

C. Method 2C—Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube);

D. Method 2D—Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts;

E. Method 2F—Determination of Stack Gas Velocity and Volumetric Flow Rate With Three-Dimensional Probes;

F. Method 2G—Determination of Stack Gas Velocity and Volumetric Flow Rate With Two-Dimensional Probes; or

G. Method 2H—Determination of Stack Gas Velocity Taking Into Account Velocity Decay Near the Stack Wall;

4. To analyze the exhaust gases, use the method in 10 CSR 10-6.030(3);

5. To measure the moisture in the stack gas, use the method in 10 CSR 10-6.030(4); and

6. To determine capture efficiency, use the procedure in 10 CSR 10-6.030(20).

(B) Test Methods for Determining Coating Properties. The coating properties in paragraphs (5)(B)1. through (5)(B)6. of this rule shall be determined from the coating manufacturer's supplied data or the method referenced in 10 CSR 10-6.030(14)(C). If there is a discrepancy between the manufacturer's supplied data and the method referenced in 10 CSR 10-6.030(14)(C), compliance shall be based on the method referenced in 10 CSR 10-6.030(14)(C).

1. Density of coating, D_C.

A. Electrodeposition primer. For electrodeposition primer, the coating density shall be as received.

B. All other coatings. For all other coatings, the coating density shall be as applied.

2. Volume fraction of solids in the coating, V_S.

A. Electrodeposition primer. For electrodeposition primer, the volume fraction of solids in the coating shall be as received.

B. All other coatings. For all other coatings, the volume fraction of solids in the coating shall be as applied.

3. Weight fraction of exempt compounds in the coating, W_E.

4. Weight fraction of regulated VOC in the coating, W_O. This value does not include the weight fraction of water or exempt compounds.

A. Electrodeposition primer. For electrodeposition primer, the weight fraction of VOC in the coating shall be as received.

B. All other coatings. For all other coatings, the weight fraction of VOC in the coating shall be as applied.

5. Weight fraction of solids in the coating, W_S.

6. Weight fraction of water in the coating, W_W.

(C) Other Test Methods and Calculations.

1. Calculating the VOC content of the coating.

A. The VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), shall be determined using Equation (1) as follows:

$$B = \frac{D_C \times W_O}{1 - \left(\frac{D_C \times W_W}{8.33}\right) - \left(\sum_{j=1}^{m} \frac{D_C \times W_{E_j}}{D_{E_j}}\right)} \qquad (1)$$

Where:

B = VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds);

D_C = density of coating as applied, expressed as pounds per gallon;
W_O = weight fraction of regulated VOC in the coating, as applied. This value does not include the weight fraction of water or exempt compounds;
W_W = weight fraction of water in the coating, as applied;
W_E = weight fraction of exempt compounds in the coating, as applied;
D_E = density of each exempt compound, expressed as pounds per gallon;
m = number of exempt compounds in the coating; and
8.33 = density of water, expressed as pounds per gallon.

B. The VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating solids, shall be determined using Equation (2) as follows:

$$B_S = \frac{D_C \times W_O}{V_S} \qquad (2)$$

Where:
B_S = VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating solids;
D_C = density of coating as applied, expressed as pounds per gallon;
W_O = weight fraction of regulated VOC in the coating, as applied. This value does not include the weight fraction of water or exempt compounds; and
V_S = volume fraction of solids in the coating, as applied.

C. The VOC content of the coating as applied, expressed as pounds of VOC per pound of coating solids, shall be determined using Equation (3) as follows:

$$B_{MWS} = \frac{D_C \times W_O}{D_C \times W_S} \qquad (3)$$

Where:
B_{MWS} = VOC content of the coating as applied, expressed as pounds of VOC per pound of coating solids;
D_C = density of coating as applied, expressed as pounds per gallon;
W_O = weight fraction of regulated VOC in the coating, as applied. This value does not include the weight fraction of water or exempt compounds; and
W_S = weight fraction of solids in the coating, as applied.

2. Equivalent emission limits. Emission limits expressed as pounds of VOC per gallon of coating (minus water and exempt compounds) shall be converted to an equivalent emission limit expressed as pounds of VOC per gallon of coating solids using Equation (4) as follows:

$$L_S = \frac{L}{\left(1 - \frac{L}{7.36}\right)} \qquad (4)$$

Where:
L_S = emission limit expressed as pounds of VOC per gallon of coating solids;
L = emission limit expressed as pounds of VOC per gallon of coating (minus water and exempt compounds); and
7.36 = average density of solvents, in pounds per gallon, used to originally establish the emission limits.

3. Weighted averaging.

A. The daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), shall be calculated using Equation (5) as follows:

$$DAVG_{VW} = \frac{\sum_{i=1}^{n} (A_i \times B_i)}{C} \qquad (5)$$

Where:
$DAVG_{VW}$ = daily volume-weighted average VOC content, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds);
A = daily gallons of each coating used (minus water and exempt compounds) in a surface coating unit;
B = VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds). This is determined by subparagraph (5)(C)1.A. of this rule;
C = total daily gallons of coatings used (minus water and exempt compounds) in a surface coating unit; and
n = number of coatings used in a surface coating unit.

B. The daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating solids, shall be calculated using Equation (6) as follows:

$$DAVG_{VWS} = \frac{\sum_{i=1}^{n} (A_{S_i} \times B_{S_i})}{C_S} \qquad (6)$$

Where:
$DAVG_{VWS}$ = daily volume-weighted average VOC content, expressed as pounds of VOC per gallon of coating solids;
A_S = daily gallons of coating solids for each coating used in a surface coating unit;
B_S = VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating solids. This is determined by subparagraph (5)(C)1.B. of this rule;
C_S = total daily gallons of coatings solids used in a surface coating unit; and
n = number of coatings used in a surface coating unit.

C. The daily mass-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per pound of coating solids, shall be calculated using Equation (7) as follows:

$$DAVG_{MWS} = \frac{\sum_{i=1}^{n} (A_{MWS_i} \times B_{MWS_i})}{C_{MWS}} \qquad (7)$$

Where:
$DAVG_{MWS}$ = daily mass-weighted average VOC content, expressed as pounds of VOC per pound of coating solids;
A_{MWS} = daily pounds of coating solids for each coating used in a surface coating unit;
B_{MWS} = VOC content of the coating as applied, expressed as pounds of VOC per pound of coating solids. This is determined by subparagraph (5)(C)1.C. of this rule;
C_{MWS} = total daily pounds of coatings solids used in a surface coating unit; and
n = number of coatings used in a surface coating unit.

D. The monthly volume-weighted average VOC emission rate of an electrodeposition primer, expressed as pounds of VOC per gallon of coating solids deposited, shall be determined using Equation (8) as follows:

$$MAVG_{VWS} = \left[\frac{\sum_{i=1}^{n} L_{C_i} D_{C_i} W_{O_i} + \sum_{j=1}^{m} L_{D_j} D_{D_j}}{\sum_{i=1}^{n} L_{C_i} V_{S_i}}\right] \times [1\text{-}E/100] \quad (8)$$

Where:
$MAVG_{VWS}$ = monthly volume-weighted average VOC emission rate of the electrodeposition primer, expressed as pounds of VOC per gallon of coating solids deposited;
L_C = monthly volume of each coating consumed, as received, expressed as gallons;
D_C = density of each coating as received, expressed as pounds per gallon;
W_O = weight fraction of VOC in each coating, as received;
L_D = monthly volume of each type of VOC dilution solvent added to the coating, expressed as gallons;
D_D = density of each type of VOC dilution solvent added to the coating, expressed as pounds per gallon;
V_S = volume faction of solids in each coating as received, expressed as gallons of solids per gallon of coating;
E = overall control system efficiency;
n = number of coatings used; and
m = number of VOC dilution solvents used.

E. The monthly volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), shall be calculated using Equation (9) as follows:

$$MAVG_{VW} = \frac{\sum_{i=1}^{n} (A_i \times B_i)}{C} \quad (9)$$

Where:
$MAVG_{VW}$ = monthly volume-weighted average VOC content as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds);
A = monthly gallons of each coating used (minus water and exempt compounds) in a surface coating unit;
B = VOC content of the coating as applied, expressed as pounds of VOC per gallon of coating (minus water and exempt compounds), as delivered to the coating applicator. This is determined by subparagraph (5)(C)1.A. of this rule;
C = total monthly gallons of coatings used (minus water and exempt compounds) in a surface coating unit; and
n = number of coatings used in a surface coating unit.

4. The required control system efficiency shall be determined using Equation (10) as follows:

$$R = \left[\frac{(DAVG_{VWS} - L_S)}{DAVG_{VWS}}\right] \times 100 \quad (10)$$

Where:
R = required control system efficiency;
$DAVG_{VWS}$ = daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating solids, per subparagraph (5)(C)3.B. of this rule; and
L_S = emission limits expressed as pounds of VOC per gallon of coating solids, per paragraph (5)(C)2. of this rule.

*AUTHORITY: section 643.050, RSMo Supp. [1999] **2010**. Original rule filed Dec. 15, 1978, effective July 12, 1979. For intervening history, please consult the **Code of State Regulations**. Amended: Filed Nov. 30, 2010.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will cost private entities $2,280,500 in the aggregate. This consists of a one (1)-time initial capital cost of one hundred fifty thousand dollars ($150,000) and two hundred thirteen thousand fifty dollars ($213,050) in annualized costs.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

FISCAL NOTE
PRIVATE COST

I. Department Title: 10 – Department of Natural Resources
Division Title: 10 – Air Conservation Commission
Chapter Title: 5 – Air Quality Standards and Air Pollution Control Rules Specific to the St. Louis Metropolitan Area

Rule Number and Title:	10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations
Type of Rulemaking:	Amendment to Existing Rule

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Approximately seventy (70) surface coating facilities in the St. Louis ozone non-attainment area.	North American Industry Classification System codes: 316, 321, 326, 331, 332, 333, 334, 336, 337, 339, 482, 811, 321211, 321212, 321219, 321999, 332116, 332612, 332951, 333312, 333319, 335121, 335122, 335221, 335222, 335224, 335228, 336111, 336112, 336211, 337124, 337127, 337214, 337215, 339111, 339114, 81142 Standard Industry Classification codes: 2514, 2522, 2531, 2542, 2599, 3631, 3632, 3633, 3639, 3429, 3469, 3495, 3585, 3589, 3645, 3646, 3821, 3843 Source Classification Codes: 40200701, 40200706, 40200707, 40200710, 40200711, 40200712	$2,280,500

III. WORKSHEET

A survey was sent to seventy (70) facilities in the St. Louis ozone non-attainment area that perform surface coating operations that are likely to be affected by the rulemaking. The survey informed them of the Control Techniques Guidelines (CTGs) recently published by the U. S. Environmental Protection Agency (EPA) and requested information on the volatile organic compound (VOC) content, quantity, category, and cost of the coatings they use; the type of application equipment they use to apply the coatings; the total VOC emissions from surface coating operations; and the coating category and cost of the coatings they would use under the proposed limits set forth in the

CTGs. These facilities were identified by using Standard Industrial Classification codes, North American Industry Classification System codes, and Source Classification Codes that EPA listed in the CTGs and relevant Federal Register Notices.

Responses were received from 48 facilities. The information from the responding facilities was compiled to determine the total cost associated with compliance to the proposed limits. The results of the survey show:

Coating Category	Incremental Cost (Annualized)	Incremental Cost (Assuming 10 Year Rule Life)	One-Time Capital Cost	Total Cost of Compliance
Miscellaneous Metal and Plastic Parts	$205,410	$2,054,100	$150,000	$2,204,100
Automobile and Light-Duty Truck Assembly	$0	$0	$0	$0
Large Appliance	$0	$0	$0	$0
Metal Furniture	$0	$0	$0	$0
Flat Wood Paneling	$0	$0	$0	$0
Paper, Film, and Foil	$3,662	$36,620	$0	$36,620
Adhesive	$3,978	$39,780	$0	$39,780
Total	$213,050	$2,130,500	$150,000	$2,280,500

IV. ASSUMPTIONS

1. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be ten (10) years although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.
2. Compliance with the proposed emission limits would be achieved by using coatings with a weighted average VOC content that is equal to or below the proposed limits. No control system would be used to achieve compliance. This assumption is consistent with the EPA CTG cost consideration.
3. The incremental cost of compliance results from the reformulation or substitution of coatings that meet the proposed limits. In many instances, the cost of the reformulated coating per gallon is higher than the cost per gallon of the present coating.
4. Where responding facilities provided a cost estimate for the coating they would use to comply with the proposed limits, that cost was used to estimate their cost of compliance.
5. Where responding facilities did not provide a cost estimate for the coating they would use to comply with the proposed limits, the cost of compliance was

estimated by using the cost effectiveness in the CTGs. These cost effectiveness values, expressed at dollars per ton of VOC emission reduction, are:

a. Miscellaneous Metal and Plastic Parts Coatings - $1,758.
b. Automobile and Light-Duty Truck Assembly Coatings - $0. The EPA states that affected facilities are already using the control measures in the CTG and, therefore, should incur no additional costs.
c. Large Appliance Coatings - $500.
d. Metal Furniture Coatings - $200.
e. Flat Wood Paneling Coatings - $1,600.
f. Paper, Film, and Foil Coatings - $1,200.
g. Miscellaneous Industrial Adhesives - $265.

6. Where facilities did not reply to the survey, information for their VOC emissions was obtained from 2008 Missouri Emissions Inventory System (MOEIS) records. Using this information, the VOC reduction percentage and cost per ton from the appropriate CTGs were used to determine their estimated cost of compliance and reduction in VOC emissions. Facilities that showed no VOC emissions from surface coating operations in their 2008 MOEIS record were assumed to have no cost impact and no VOC reductions. Facilities that had no 2008 MOEIS record were not included in the calculations.
7. The annual quantity of each coating used would remain the same for the present coatings and the coatings used to comply with the proposed limits. In other words, they would have the same substrate coverage.
8. The coating usage was based on calendar year 2008 data from industry surveys or MOEIS records.
9. When the proposed emission limit was less than the present VOC content of the coating, the VOC emission reduction, excluding adhesives, was calculated using the following equation:

$$AR_{VOC} = \frac{(C - L) \cdot U}{2000}$$

Where:

AR_{VOC} = is the annual VOC reductions, expressed as tons

C = Present VOC content of the coating, expressed as pounds of VOC per gallon of coating

L = The VOC content of the coating under the proposed limits, expressed as pounds of VOC per gallon of coating. This VOC content was assumed to be equal to the proposed limits.

U = Annual quantity of coating used, expressed as gallons per year. This was assumed to be equal for the present coating and the proposed coating.

10. For adhesives, the VOC reduction was assumed to be 64% with a cost effectiveness of $265 per ton, as stated in the CTG.
11. The financial figures for the information received from the surveyed facilities are in 2008 dollars. The cost effectiveness figures presented in the individual CTGs are assumed to be current for the year they were published, ranging from 2006 to 2008.
12. No additional recordkeeping costs will be incurred. Affected facilities are already maintaining records of the quantity and weighted average VOC content of their coatings.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 5—Air Quality Standards and Air Pollution Control Rules Specific to the St. Louis Metropolitan Area

PROPOSED AMENDMENT

10 CSR 10-5.340 Control of Emissions From Rotogravure and Flexographic Printing *[Facilities]* ***Operations***. The commission proposes to amend the rule title and rule purpose; amend sections (1), (2), (3), (4), and (5); and delete section (6). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule restricts volatile organic compound emissions from rotogravure and flexographic printing operations including flexible package printing operations. This amendment will update the rule to include specific emission limits of volatile organic compounds for flexible package printing operations in the St. Louis ozone nonattainment area. This will make the limits consistent with the current federal Reasonably Available Control Technology guidance documents. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the U.S. Environmental Protection Agency 2006 Control Techniques Guidelines for flexible package printing and Clean Air Act section 182(b)(2).

PURPOSE: This rule restricts volatile organic compound emissions from rotogravure and flexographic printing [facilities] ***operations including flexible package printing operations***.

(1) *[Application]* **Applicability**.

(A) This rule shall apply throughout St. Louis City and Jefferson, St. Charles, Franklin**,** and St. Louis Counties.

(B) This rule applies to installations with **at least one (1) of the following:**

1. *[u]***U**ncontrolled potential emissions equal to or greater than two hundred fifty kilograms (250 kg) per day or one hundred (100) tons per year of volatile organic compounds (VOC) from the combination of rotogravure **and** flexographic printing presses. The uncontrolled potential emissions are the potential emissions (as defined) plus the amount by weight of VOCs whose emission into the atmosphere is prevented by the use of air pollution control devices*[.]*;

2. Individual flexible package printing press(es) with the potential to emit VOCs in an amount equal to or greater than twenty-five (25) tons per year; and

3. Flexible package printing operations that have actual VOC emissions, including related cleaning activities, before consideration of controls, of at least three (3) tons per twelve (12)-month rolling period. Once an installation exceeds this applicability level, it shall remain subject to this rule even if its actual emissions drop below this applicability level until it can demonstrate, to the satisfaction of the director, that the total actual VOC emissions from flexible package printing operations including related cleaning activities, is less than three (3) tons per twelve (12)-month rolling for five (5) consecutive twelve (12)-month periods.

(2) Definitions.

[(A)] Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.

[(B) The definition of a term specific to this rule is as follows: ink formulation as applied, includes the base ink and any additives such as thinning solvents to make up the ink material that is applied to a substrate.]

(3) *[Emission Limits]* **General Provisions**.

(A) *[No owner or operator shall use or permit the use of any of the following printing presses unless they are equipped with a control device. The control device shall remove, destroy or prevent the emission of VOCs into the ambient air by at least the percentage indicated by weight of the uncontrolled VOC emissions on a daily weighted basis.]* **VOC Emission Control for Flexographic and Rotogravure Printing Presses. Each source that satisfies the applicability requirement of paragraph (1)(B)1. of this rule shall meet one (1) of the following:**

1. No owner or operator shall use or permit the use of any of the following printing presses unless they are equipped with a control device. The control device shall remove, destroy, or prevent the emission of VOCs into the ambient air by at least the percentage indicated by weight of the uncontrolled VOC emissions on a daily weighted basis.

Printing Press	Percentage
Flexographic	60
Publication Rotogravure	75
Other Rotogravure	65

or

*[(B)]***2.** Low solvent technology may be used to achieve VOC emission reductions instead of the methods *[required]* in *[subsection]* **paragraph** (3)(A)**1. of this rule**. If low solvent technology is used, the following limits must be met for each press:

*[1.]***A.** For waterborne inks, the volatile portion of the ink as applied to the substrate must contain no more than twenty-five percent (25%) by volume of VOC; and

*[2.]***B.** For water-based or high solids inks, the ink as applied to the substrate must be at least sixty percent (60%) by volume non-VOC material.

(B) VOC Emission Control for Flexible Package Printing Presses. Each source that satisfies the applicability requirement of paragraph (1)(B)2. of this rule shall meet one (1) of the following:

1. No owner or operator shall use or permit the use of any of the following flexible packaging printing presses unless they are equipped with a control device. The control device shall remove, destroy, or prevent the emission of VOCs into the ambient air by at least the percentage indicated by weight of the uncontrolled VOC emissions on a daily weighted basis.

Flexible Package Printing Press First Installed	VOC Control Device First Installed	VOC Control Percentage
Prior to March 14, 1995	Prior to September 1, 2011	65
Prior to March 14, 1995	On or after September 1, 2011	70
On or after March 14, 1995	Prior to September 1, 2011	75
On or after March 14, 1995	On or after September 1, 2011	80

or

2. Low solvent technology may be used to achieve VOC emission reductions instead of the methods in paragraph (3)(B)1. of this rule. If low solvent technology is used, all inks, coatings, and adhesives combined must meet one (1) of the following limits for each press:

A. Contain no more than 0.8 pounds of VOC per pound solids applied; or

B. Contain no more than 0.16 pounds of VOC per pound materials applied.

(C) *[No owner or operator shall use or permit the use of any flexographic or rotogravure printing press that uses cleanup]* **Press Cleaning. For the purpose of this rule, a cleaning operation is any activity involving the cleaning of a press or press parts or removal of dried ink from areas around a press including the off-line cleaning of inks, coatings, and adhesives from press parts that have been removed from the press for cleaning. It does not include the use of parts washers or cold cleaners for purposes other than removing inks, coatings, or adhesives or the use of janitorial supplies (e.g., detergents or floor cleaners) to clean areas around a press. For sources meeting any of the applicability requirements of subsection (1)(B) of this rule, no owner or operator of any applicable printing press shall perform a cleaning operation that uses cleaning** solvents containing VOCs unless—

1. The *[cleanup]* **cleaning** solvents are kept in tightly-covered tanks or containers during transport and storage;

2. The **used** cleaning cloths *[used]* **contaminated** with the *[cleanup]* **cleaning** solvents are placed in tightly-closed containers *[when not in use and]* while awaiting off-site transportation. The cleaning cloths *[should]* **shall** be properly cleaned and disposed of*[. The cloths, when properly cleaned or disposed of, are processed in a way that as much of the solvent as practicable is recovered for some further use or destroyed. Cleaning and disposal methods shall be approved by the director]*; and

3. An owner or operator may use an alternate method for reducing *[cleanup]* **cleaning** solvent VOC emissions, including the use of low VOC *[cleanup]* **cleaning** solvents, if the owner or operator shows the emission reduction is equal to or greater than paragraphs (3)(C)1. and 2**. of this rule**. This alternate method must be approved by the director.

(4) **Reporting and** Record Keeping. **All owners and operators subject to this rule shall maintain records as required by this section to determine continuous compliance with this rule. These records shall be kept for at least five (5) years or longer if enforcement action is pending. These records shall be available immediately upon request for review by the Department of Natural Resources' personnel and other air pollution control agencies upon presentation of proper credentials.**

(A) For owners or operators using an add-on control device*[s]*(s) to meet the requirements of *[subsection]* **paragraph** (3)(A)**1. or (3)(B)1. of this rule**, the following parameters shall be monitored and recorded to determine compliance with *[subsection (3)(A)]* **the applicable provisions of this rule**:

1. *[Exhaust gas]* **Operating** temperature of all *[incinerators or temperature rise across a catalytic incinerator bed]* **VOC destruction devices monitored** on a continuous basis **while a connected printing press is operating and logged at least once every fifteen (15) minutes. The operating temperature is the gas temperature upstream of the catalyst bed for catalytic oxidizers and the oxidizer operating temperature for thermal and regenerative oxidizers**;

2. VOC breakthrough on a carbon adsorption unit on a continuous basis;

3. Results of **all** emissions testing **and inspections of control equipment** as required in section (5) of this rule when performed;

4. Maintenance, repairs**,** and malfunction of any air pollution control equipment when performed; *[and]*

5. The cumulative amount of VOC recovered during a calendar month for all VOC recovery equipment; and

*[5.]***6.** Any other monitoring parameter required by the director to determine compliance with *[subsection]* **paragraph** (3)(A)**1. or (3)(B)1. of this rule**.

(B) For owners or operators meeting the requirements of *[subsection (3)(B)]* **paragraphs (3)(A)2. and (3)(B)2. of this rule,** for each ink formulation used, the following shall be recorded for each press to determine continuous compliance with *[subsection (3)(B)]* **the applicable provisions of this rule**:

1. Volume-weighted ink VOC content in percent by volume for each ink formulation as applied on a monthly basis;

2. Results of ink testing as required in section (5) of this rule when performed**, manufacturer's formula specification sheet, or Material Safety Data Sheets (MSDS) for each ink purchased**; and

3. Any other information required by the director to determine compliance with *[subsection]* **paragraph** (3)(A)**2. or (3)(B)2. of this rule**.

(C) For owners and operators using low solvent technology without the use of control equipment to meet the requirements of *[subsection (3)(B)]* **paragraphs (3)(A)2. and (3)(B)2. of this rule**, and for whom subsection (4)(B) **of this rule** does not apply, the following shall be recorded **in addition to the records required by subsection (4)(B) of this rule** to determine daily compliance with *[subsection (3)(B)]* **the applicable provisions of this rule**:

[1. Volume-weighted ink VOC content in percent by volume for each ink formulation as applied on a monthly basis;]

*[2.]***1.** Ink usage in gallons for each ink formulation as applied on a daily basis for each press;

*[3.]***2.** Volume-weighted density of VOCs in ink in pounds per gallon for each ink formulation as applied on a daily basis;

*[4.]***3.** Volume-weighted average of the VOC content of each ink formulation as applied in percent by volume for each press on a daily basis;

*[5.]***4.** Ink water content in percent by volume for each ink formulation as applied on a daily basis for each press; **and**

*[6.]***5.** Ink exempt solvent content in percent by volume for each ink formulation as applied on a daily basis for each press*[;]***.**

[7. Results of ink testing as required in section (5) of this rule when performed; and

8. Any other information required by the director to determine compliance with subsection (3)(B).

(D) Records of all information required in subsections (4)(A)–(C) shall be kept for at least two (2) years. These records shall be available immediately upon request for review by Department of Natural Resources personnel and other air pollution control agencies with proper authority.]

(5) *[Determination of Compliance]* **Test Methods**.

(A) Testing and compliance demonstrations for the emission limits of *[subsection]* **paragraph** (3)(A)**1. or (3)(B)1. of this rule** shall follow the procedures contained in 10 CSR 10-6.030(14)(A) and 10 CSR 10-6.030(20). The averaging time for these tests shall be three (3) one (1)-hour tests. These procedures will determine control device capture efficiency and destruction efficiency. Control device testing will be required as the director determines necessary to verify the capture and destruction efficiencies. At a minimum, *[control device testing must be completed and submitted once to the appropriate air pollution control agency within one hundred eighty (180) days after this provision of the rule is effective (Aug. 5, 1992), unless the director determines that a valid test is already on file. Inlet and outlet gas temperature rise across a catalytic incinerator shall be used to determine daily compliance.]* **an initial emission test shall be performed after any required control equipment is installed. The emission limits of paragraph (3)(A)1. or (3)(B)1. of this rule shall not have been met until compliance has been verified at least once through this testing. Testing shall also be required after significant modifications to any control equipment required by this rule. Significant modifications include any repairs or changes that might substantially alter or affect the overall control efficiency. The oxidizer operating temperature or the temperature of the gas upstream of the catalyst bed monitored and recorded in accordance with paragraph (4)(A)1. of this rule shall be used as the operating parameter for determining continuous compliance.** These temperatures

shall be monitored with an accuracy of the greater of plus or minus three-fourths percent (±0.75%) of the temperature being measured expressed in degrees Celsius or two and one-half degrees Celsius (2.5°C). **The operating parameter temperatures shall be computed as the time-weighted average of the temperature values recorded during the test. The owner or operator must maintain the oxidizer at a three (3)-hour average temperature no less than fifty degrees Fahrenheit (50°F) below the average temperature observed during the most recent stack test to demonstrate continuous compliance.**

(B) Testing and compliance demonstrations for the emission limits of *[subsection (3)(B)]* **paragraph (3)(A)2. or (3)(B)2. of this rule** shall follow the procedures contained in 10 CSR 10-6.030 **subsections** (14)(C) **and (D), respectively**. *[This]* **These** procedure**s** will determine the VOC content of inks. Ink testing will be required as the director determines necessary to verify the manufacturers' formula specifications. *[At a minimum, ink testing will be required once after February 6, 1992.]* Ink manufacturer's formula specifications **or MSDS** shall be used to determine *[daily]* compliance.

(C) Control Device Inspection. For catalytic oxidizers, the catalyst bed material shall be inspected annually for general catalyst condition and any signs of potential catalyst depletion. The owner or operator shall also collect a representative sample of the catalyst from the oxidizer, per manufacturer's recommendations, and have it tested to evaluate the catalyst's capability to continue to function at or above the required control efficiency. An evaluation of the catalyst bed material shall be conducted whenever the results of the inspection indicate signs of potential catalyst depletion or poor catalyst condition based on manufacturer's recommendations, but not less than once per year.

[(6) Compliance Dates.

(A) The owner or operator of a rotogravure or flexographic printing installation subject to this rule must submit a final control plan to the director by December 31, 1980, for his/her approval. This plan must include the following:

1. A detailed plan of process modifications; and

2. A time schedule for compliance containing increments of progress and a final compliance date.

(B) Compliance with this rule shall be accomplished by any installation as expeditiously as practicable, but in no case shall final compliance extend beyond December 31, 1982.]

*AUTHORITY: section 643.050, RSMo [1994] **2000**. Original rule filed March 13, 1980, effective Sept. 12, 1980. Amended: Filed Nov. 10, 1981, effective May 13, 1982. Amended: Filed Oct. 4, 1988, effective March 11, 1989. Amended: Filed July 15, 1991, effective Feb. 6, 1992. Amended: Filed Nov. 30, 2010.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will cost private entities eight hundred fifty-two thousand dollars ($852,000) in the aggregate. This consists of a one (1)-time initial capital cost of two hundred thirty-two thousand dollars ($232,000) and sixty-two thousand dollars ($62,000) in annualized costs.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

FISCAL NOTE
PRIVATE COST

I. Department Title: 10 – Department of Natural Resources
Division Title: 10 – Air Conservation Commission
Chapter Title: 5 – Air Quality Standards and Air Pollution Control Rules Specific to the St. Louis Metropolitan Area

Rule Number and Title:	10 CSR 10-5.340 Control of Emissions From Rotogravure and Flexographic Printing Facilities
Type of Rulemaking:	Amendment to Existing Rule

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which might be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
2	Flexible Package Printing North American Industry Classification System codes (NAICS): 322221, 326112, 322223, 3265111, 322224, 32225, 332999 Standard Industry Classification code (SIC): 2754 Source Classification Codes (SCC): 40500301, 40500302, 40500311, 40500312, 40500314, 40500501, 40500511, 40500512, 40500513, 40500514	$852,000

III. WORKSHEET

Flexible Package Printing (FPP)

Proposed Rule Provisions	Estimated # of applicable presses or facilities (N)	Total Capital Investment (TCI)	Total Annual Cost (TAC) (per press / facility)	Total Cost of Compliance over life of rule (TCC)
Press/Dryer VOC Emission Controls (Catalytic Oxidizer)	1	$232,000	$62,000	$852,000
Cleaning	2	$0	$0	$0
		$232,000	$62,000	**$852,000**

(TCC) = N * [(TCI) + 10 * (TAC)]

IV. ASSUMPTIONS

1. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be 10 years although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.
2. Since this rule amendment is substantially similar to the emission limits and techniques presented in the U.S. Environmental Protection Agency's (EPA) *Control Techniques Guidelines* (CTG) *for Flexible Package Printing* (EPA-453/R-06-003, September 2006), this private entity fiscal cost analysis is based on the CTG cost estimates outlined in Appendix B of that document.
3. All figures are in 2005 dollars matching EPA's cost analysis.
4. Costs are based on 2 flexible package printing (FPP) facilities being applicable at the 3 tons per year (tpy) threshold that will have to comply with the cleaning provisions and 1 FPP press at the 25 tpy potential to emit level that will have to install a dryer VOC control device.
5. Costs are based on the VOC control device being an add-on fixed bed catalytic oxidizer with either a dryer exhaust rate of 2900 cubic feet per minute (cfm), or a dryer air flow rate of 5800 cfm employing recirculation at 50%. This typical or average installation matches Case 1.A in Appendix B of the EPA's CTG and has the specifications as outlined in the table below:

FPP Dryer Typical Fixed Bed Catalytic Oxidizer

Parameter	Specification
Solvent usage, tpy	25
Capture efficiency, %	70%
Control device efficiency, %	95%
Operating hours, hr/yr	2000hr/yr
Exhaust rate/oxidizer capacity	2900 cfm
TCI, $	$232,000
Solvent loading, lb/hr	17.5 lb/hr
Assumed VOC compound	toluene
VOC concentration, parts per million by volume (ppmv)	420 ppmv
TAC, $	$62,000
Solvent loading, tpy	17.5 ton/yr
VOC emission reduction, 95% efficiency	16.6
Cost effectiveness, $/ton	3,700

6. Total capital investment costs for the add-on control device is based on purchased equipment costs which include the control device and auxiliary equipment costs, instrumentation costs, sales tax, and freight costs. Costs for instrumentation (10 percent), sales tax (3 percent), and freight (5 percent) were estimated to be 18

percent of control device and auxiliary equipment costs.

7. Several components of the annual costs include direct annual costs such as labor wages and maintenance costs, utilities, and raw materials. Common costs for indirect annual costs include overhead and administrative charges. Direct costs are listed below:

Assumptions for TAC Calculations

Parameter	Factor
Direct Annual Costs	
Operator Wage Rate (except steam stripper)	$12.95/hr
Maintenance Labor Wage Rate	$14.95/hr
Supervisor Labor Cost	15 percent of Operator labor cost
Maintenance materials cost	100 percent of Maintenance Labor cost
Utilities Natural Gas Cost Electricity Cost	$3.30 per 1,000 scf $0.059 per kW-hr
Indirect Annual Costs	
Overhead	60 percent of all labor and maintenance material costs
Admin, Property Taxes, and Insurance	4 percent of TCI

8. The cleaning provisions outline responsible work practices: keeping cleaning materials and used shop towels in closed containers, and conveying cleaning materials from one location to another in closed containers or pipes. Since these work practices could result in offsetting cleaning solvent costs, it is assumed that there is no cost to comply with the cleaning provisions.
9. No additional recordkeeping costs will be incurred. Affected facilities are either already maintaining appropriate records or additional recordkeeping costs are negligible.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 5—Air Quality Standards and Air Pollution Control Rules Specific to the St. Louis Metropolitan Area

PROPOSED AMENDMENT

10 CSR 10-5.442 Control of Emissions From Lithographic *and Letterpress* Printing Operations. The commission proposes to amend the rule title and rule purpose; amend sections (1), (2), (3), and (4); delete section (5); and renumber and amend section (6). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule restricts volatile organic compound emissions from lithographic and letterpress printing operations. This amendment will update the rule to include specific emission limits of volatile organic compounds for both offset lithographic and letterpress printing operations in the St. Louis ozone nonattainment area. This will make the limits consistent with the current federal Reasonably Available Control Technology guidance documents. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the U.S. Environmental Protection Agency 2006 Control Techniques Guidelines for offset lithographic printing and letterpress printing and Clean Air Act section 182(b)(2).

*PURPOSE: This rule restricts volatile organic compound emissions from lithographic **and letterpress** printing operations.*

[(1) Definitions. Definitions of some terms specified in this rule may be found in 10 CSR 10-6.020. Other definitions specific to this rule are as follows:

(A) Alcohol—Refers to isopropanol, isopropyl alcohol; normal propyl alcohol or ethanol;

(B) Alcohol Substitutes—Nonalcohol additives that contain volatile organic compounds (VOCs) and are used in the fountain solution;

(C) Cleanup solution—A liquid used to remove printing ink and debris from the surfaces of the printing press and its parts;

(D) Fountain solution—The solution which is applied to the image plate to maintain the hydrophilic properties of the nonimage areas. It is primarily water containing an etchant, gum arabic and a dampening aid;

(E) Heatset—A class of web-offset lithography which requires a heated dryer to evaporate the ink oils and solvents from the printing inks;

(F) Lithographic printing—A printing process where a planographic plate is used with the image area oleophilic and the nonimage area hydrophilic;

(G) Press—A printing production assembly that can be made up of one (1) or many units to produce a finished product;

(H) Printing—Any operation that imparts color, design, alphabet, or numerals on a substrate;

(I) Printing ink—Any fluid or viscous composition used in printing, impressing, or transferring an image onto a substrate;

(J) Offset—The process that transfers an image from a plate to a rubber blanket cylinder before transfer to the substrate surface to be printed;

(K) Sheet-fed—Printing presses that are fed from a stack of individual paper sheets instead of a web. Sheet-fed presses generally use coldset inks; and

(L) Web—The substrate printed in a continuous roll-fed printing process.]

[(2) Applicability.

(A) This rule shall apply to installations that operate offset lithographic printing presses including heatset web offset presses, non-heatset web offset presses (newspaper and non-newspaper), and non-heatset sheet-fed offset presses in the City of St. Louis and Jefferson, St. Charles, Franklin and St. Louis Counties.

(B) This rule shall apply only to installations described in subsection (2)(A) which have ever had the potential to emit VOCs equal to or greater than one hundred (100) tons per year. Once the installation exceeds the applicability level of this rule, it shall remain subject to this rule even if its potential emissions drop below the applicability level.

(C) This rule shall not apply to printing on fabric, metal or plastic.]

(1) Applicability.

(A) This rule shall apply to installations that operate offset lithographic or letterpress printing presses including heatset web, non-heatset web (newspaper and non-newspaper), and non-heatset sheet-fed presses in the City of St. Louis and Jefferson, St. Charles, Franklin, and St. Louis Counties.

(B) This rule shall apply only to installations described in subsection (1)(A) of this rule, with total actual emissions from lithographic and letterpress printing operations, including related cleaning activities, before consideration of controls, of more than three (3) tons per twelve (12)-month rolling period of volatile organic compounds (VOCs).

(C) This rule shall not apply to printing on fabric, metal, or plastic.

(D) Once the installation exceeds the applicability level of this rule, it shall remain subject to this rule even if its actual emissions drop below the applicability level of this rule until it can demonstrate, to the satisfaction of the director, that the total actual VOC emissions from lithographic and letterpress printing operations, including related cleaning activities, before consideration of controls, is less than three (3) tons per twelve (12)-month rolling for five (5) consecutive twelve (12)-month periods.

(E) VOC emissions calculations guidance may be found in subsection (5)(D) of this rule. As an alternative, the material use guidance in subsection (5)(E) of this rule may be used to determine applicability.

(2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.

(3) *[Emission Limits.]* **General Provisions.**

(A) Fountain Solutions. This subsection applies only to offset lithographic presses with a total fountain solution reservoir capacity of one (1) gallon or more.

*[(A)]***1.** No owner or operator shall use or permit the use of any **applicable** offset lithographic printing press unless—

*[1.]***A.** For **each** heatset web press*[es]*—

*[A.]***(I)** The fountain solution**, as applied,** contains one and six-tenths percent (1.6%) or less by *[volume]* **weight** of alcohol; or

*[B.]***(II)** The fountain solution**, as applied,** contains three percent (3.0%) or less by *[volume]* **weight** of alcohol and is refrigerated to a temperature of sixty degrees Fahrenheit (60 °F)*[,]* or less; or

*[C.]***(III)** The fountain solution**, as applied,** contains five percent (5.0%) or less by *[volume]* **weight of** alcohol substitutes; and

*[D.]***(IV)** The fountain solution mixing tanks are covered for alcohol-based solutions;

*[2.]***B.** For **each** sheet-fed press*[es]* **with a maximum sheet size greater than eleven inches by seventeen inches (11" × 17")** —

*[A.]***(I)** The fountain solution**, as applied,** contains five percent (5.0%) or less by *[volume]* **weight** of alcohol; or

*[B.]***(II)** The fountain solution**, as applied,** contains eight and five-tenths percent (8.5%) or less by *[volume]* **weight** of alcohol and is refrigerated to a temperature of sixty degrees Fahrenheit (60 °F)*[,]* or less; or

*[C.]***(III)** The fountain solution**, as applied,** contains five percent (5.0%) or less by *[volume]* **weight** of alcohol substitutes or a combination of alcohol and alcohol substitutes; and

*[D.]***(IV)** The fountain solution mixing tanks containing alcohol-based solutions are covered;

*[3.]***C.** For **each** non-heatset web press*[es—]***, the fountain solution, as applied, contains no alcohol and five percent (5.0%) or less by weight of alcohol substitutes;**

[A. The fountain solution contains five percent (5.0%) or less by volume alcohol substitutes; or

B. The fountain solution contains five percent (5%) or less by volume of a combination of alcohol and alcohol substitutes; and

C. The fountain solution mixing tanks containing alcohol based solutions are covered;]

*[4.]***2.** Direct measurement of the alcohol content of the fountain solution *[sample(s) should]***, as applied, shall** be performed **and recorded** with a *[modification of the EPA Method 415.1. Alternately, a sample of the fountain solution may be taken from the fountain tray or reservoir of fountain solution during use and measured with a hydrometer or refractometer. The unit shall be considered in compliance with paragraphs (3)(A)1., 2., or 3. if the refractometer or hydromenter measurement is less than or equal to the measurement obtained with a modification of EPA Method 415.1, plus ten percent (10%)]* **hydrometer, equipped with temperature correction or with readings adjusted for temperature, at least once per day or once per batch, whichever is longer. A standard solution shall be used to calibrate the hydrometer once per month for the type of alcohol used in the fountain**;

*[5.]***3. For fountain solutions, as applied, containing alcohol substitutes or nonalcohol additives and, as an alternative to paragraph (3)(A)2. of this rule,** *[The]* **the** VOC content *[of a fountain solution containing alcohol substitutes or nonalcohol additives]* shall be established with proper record keeping *[including]* **which may include, as necessary to determine compliance,** the amount of concentrated substitute added per quantity of fountain water, date of preparation**,** *[and]* calculated VOC content of the final solution**, or by measurement using U.S. Environmental Protection Agency (EPA) Method 24 analysis as outlined in paragraph (5)(C)1. of this rule. For automatic mixing systems, verification and record keeping of the mixer settings shall be performed at least once each month**; and

*[6.]***4.** *[Determination of]* **The** fountain solution temperature for **each required** refrigerated fountain **reservoir containing alcohol-based** solutions shall be *[determined]* **measured at least once per day or once per batch, whichever is longer,** by a thermometer or other temperature detection device capable of reading to one-half degree Fahrenheit (0.5 °F).

(B) **Press Cleaning.** No owner or operator shall use or permit the use of any **applicable** offset lithographic **or letterpress** printing press *[that uses cleanup solutions containing VOCs]* unless—

1. *[The cleanup solution has]* **All cleaning solutions, excluding a quantity not to exceed one hundred ten (110) gallons per facility in any twelve (12) consecutive months, shall have** a VOC content of *[thirty percent (30%)]* **seventy percent (70%)** or less, by weight, or a composite **partial** vapor pressure less than or equal to ten (10) millimeters of mercury (Hg) at twenty degrees Celsius (20 °C);

2. The *[cleanup]* **cleaning** solutions are kept in tightly-covered *[tanks or containers during transport and storage; and]* **containers at all times except when being dispensed as needed for cleaning operations;**

3. The **used** cleaning cloths *[used]* **contaminated** with *[the cleanup]* **cleaning** solutions are placed in tightly-closed containers *[when not in use and]* while awaiting off-site transportation. The cleaning cloths should be properly cleaned and disposed*[. The cloths, when properly cleaned or disposed, shall be processed in such a way that as much of the solvent, as practicable, is recovered for further use or is destroyed. A cleaning and disposal plan shall be submitted to the director by the compliance deadline specified in section (5) of this rule. A copy of the plan must be kept on-site for inspection purposes.]***; and**

4. The VOC content or composite partial vapor pressure of the cleaning solution, as applied, shall be established with proper record keeping which may include, as necessary to determine compliance, the amount of concentrated cleaning solution added per quantity of water, date of preparation, calculated VOC content, composite partial vapor pressure of the final solution, by measurement using EPA Method 24 analysis as outlined in paragraph (5)(C)2. of this rule, or the formula in paragraph (5)(C)3. of this rule. For automatic blanket wash systems, verification and record keeping of the mixer settings shall be performed at least once each month.

(C) Heatset Web Press Emission Control Systems. This subsection applies only to heatset web lithographic and letterpress printing presses with the potential to emit (PTE) VOCs from ink oil greater than twenty-five tons per year (25 TPY) unless any such press is used for book printing or has a maximum web width of twenty-two inches (22") or less.

*[(C)]***1.** No owner or operator shall use or permit the use of any *[heatset web-offset lithographic printing]* press with**out** a dryer *[that has ever had an actual emission rate of ten (10) tons per year or more of VOCs unless]* **which has** one hundred percent (100%) of *[the dryer]* **its** exhaust *[is]* ducted to a control device that **is maintained and operated to** achieve*[s ninety]***, at all times while the press is operating, at least the indicated** percent**age** *[(90%) or greater,]* by weight control efficiency *[and the highest achievable capture efficiency reasonable]*.

VOC Control Device First Installed	VOC Control Percentage
Prior to September 1, 2011	90
On or after September 1, 2011	95

The dryer pressure shall be maintained below the pressure of the press room *[to reduce the potential for fugitive VOC emissions from the dryer. Testing procedures for capture efficiencies shall be done as stated in 10 CSR 10-6.030(20), or by another method approved by the director.]* **at all times while the press is operating. Continuous dryer air flow monitoring is not required.**

2. As an alternative to achieving the applicable control efficiency in paragraph (3)(C)1. of this rule, any press shall operate its control device to maintain a maximum VOC outlet concentration of twenty parts per million by volume (20 ppmv) as hexane (C_6H_{14}) on a dry basis.

(D) Use of emission control equipment under subsection (3)(C) **of this rule** shall require that continuous **temperature** monitors be installed, calibrated, **maintained, and** operated *[and maintained]* **at all times while a connected printing press is operating.**

Temperatures shall be measured with an accuracy of plus or minus seventy-five hundredths of one percent (±0.75%) measured in degrees Celsius, or two and one-half degrees Celsius (2.5 °C). The operating temperatures to be used as the parameters for demonstrating continuous compliance shall be determined per subsection (5)(A) of this rule. The monitors continuously shall measure—

1. *[The exhaust gas temperature of all VOC destruction devices and the gas temperature immediately upstream and downstream of any catalytic bed with an accuracy of plus or minus seventy-five hundredths of one percent (+0.75 %) measured in degrees Celsius, or two and one-half degrees Celsius (2.5°C)]* **For catalytic oxidizers, the gas temperature upstream of the catalyst bed**;

2. *[The cumulative amount of VOC recovered during a calendar month for all VOC recovery equipment attached to a dryer]* **For thermal and regenerative oxidizers, the oxidizer operating temperature**; and

3. Any other parameters considered necessary by the director to verify **compliance and** proper operation of emission control equipment.

(4) *[Recordkeeping]* **Reporting and Record Keeping**.

(A) All persons subject to this rule shall maintain records as required by this section sufficient to determine continuous compliance with this rule. These records shall be kept for at least *[two (2)]* **five (5)** years *[to be automatically extended]* **or longer** if enforcement action is pending. These records shall be available immediately upon request for review by the Department of Natural Resources personnel and other air pollution control agencies upon presentation of proper credentials.

(B) All persons subject to subsection (3)(C) **of this rule** shall maintain records for each control device sufficient to demonstrate that the control efficiency is being maintained. **These records shall include, but are not limited to:**

1. The temperature readings, logged at least once every fifteen (15) minutes, from the monitors required by paragraph (3)(D)1. of this rule; and

2. The operating parameters of any required control device determined from any initial or subsequent control efficiency compliance testing as outlined in subsection (5)(A) of this rule.

(C) For each *[regulated]* **applicable** printing press, records shall be maintained to show—

[1. Percent by volume of alcohol or alcohol substitute(s), if either is used, in fountain solution as monitored on a once-per-day basis;

2. Daily and monthly quantity of alcohol or alcohol substitute(s), if either is used, by volume added to the fountain solution;]

1. For each fountain solution whose VOC content is modified, the calculation or direct measurement data that indicates the resultant VOC content by weight. The calculation or measurement need only be performed once for each batch of fountain solution used except that it need not be performed at all for the dilution of a fountain solution containing alcohol substitutes purchased with less than five percent (5%) VOC content before dilution or for alcohol containing fountain solutions requiring refrigeration purchased with less than three percent (3%) or eight-and-five-tenths percent (8.5%) VOC content, for heatset web and sheet-fed presses, respectively;

*[3.]***2. For each fountain solution**, **a manufacturer's formulation data sheet or** *[A]* Material Safety Data Sheet (MSDS) listing the physical properties of alcohol or alcohol substitute(s) such as density and percent VOC as purchased from the supplier;

*[4.]***3.** Results of any testing conducted on an emission unit at a regulated facility;

*[5.]***4.** Maintenance records **and inspection results** of any air pollution control equipment; and

*[6.]***5.** The temperature of refrigerated alcohol-based fountain solution as recorded *[on a once-per-shift basis]* **at least once per day or once per batch, whichever is longer**.

(D) For each lithographic **and letterpress** printing installation subject to this rule, records shall be maintained to show—

[1. Properties of heatset inks as applied (determined by the manufacturer's formulation data), density of inks in pounds per gallon, and total VOC content in weight percent;

2. Quantity in pounds of heatset inks as applied to substrate on a monthly basis;

3. Quantity in gallons of cleanup solution used on a monthly basis; and]

*[4.]***1.** A Material Safety Data Sheet **or manufacturer's formulations data** listing the percentage by weight of VOC in the *[cleanup]* **cleaning** solution*[.]***, the composite partial vapor pressure of VOC in the cleaning solution, or the necessary data to make a determination thereof as outlined in subsection (5)(C) of this rule;**

2. For each cleaning solution whose VOC content is modified, the calculation that indicates the resultant VOC content by weight or composite partial vapor pressure. The calculation need only be performed once for each batch of cleaning solution used except that it need not be performed at all for the dilution of a cleaning solution which does not exceed the VOC limits of paragraph (3)(B)1. of this rule; and

3. The quantity of all cleaning solution used which does not meet the VOC limits set forth in paragraph (3)(B)1. of this rule on a twelve (12)-consecutive-month basis.

[(5) Compliance.

(A) All persons subject to the provisions of this rule shall provide to the director for approval a demonstration of final compliance with subsections (3)(A)–(C)—

1. Upon startup of presses which are not in existence and operating on the effective date of this rule; and

2. Within eighteen (18) months after the effective date of this rule for any presses in existence and operating on the effective date of this rule.

(B) All persons subject to the provisions of this rule and not in compliance with all provisions of this rule within twelve (12) months from the effective date of this rule must submit a compliance plan to the director for approval. This plan shall be received within six (6) months after the effective date of this rule. This plan shall include the following:

1. A detailed plan of process modifications; and

2. A time schedule for compliance containing increments of progress, including—

A. Date of submittal of the source's final control plan to the appropriate air pollution control agency;

B. Date by which contracts for emission control systems or process modifications will be awarded; or date by which orders will be issued for the purchase of component parts to accomplish emission control or process modification;

C. Date of initiation of on-site construction or installation of emission control equipment or process change;

D. Date by which on-site construction or installation of emission control equipment or process modification is to be completed; and

E Date by which final compliance is to be achieved.]

[(6) Testing Procedures. Testing and compliance demonstrations for subsection (3)(C) of this rule shall follow the procedures contained in Environmental Protection Agency Reference Methods 25 or 25A found in 40 CFR part 60 Appendix A. Further clarification shall be provided by Environmental Protection Agency memo dated October 25,

1993, from John B. Rasnic to all Environmental Protection Agency regional offices.]

(5) Test Methods. Certain test methods mentioned in this rule may be found in 10 CSR 10-6.030. Other EPA test methods specific to this rule may be found in 40 CFR 60, Appendix A.

(A) Control Efficiency Testing. To demonstrate compliance with the emission limits of subsection (3)(C) of this rule, an initial emission test shall be performed after any required control equipment is installed. The emission limits shall not have been met until compliance has been verified through this testing. Testing shall also be required after significant modifications to any control equipment required by this rule. Significant modifications include any repairs or changes that might substantially alter or affect the overall control efficiency. This subsection outlines the methods to be used for any such testing.

1. The emission unit shall be run at typical operating conditions and flow rates compatible with scheduled production during any emission testing.

2. Capture efficiency testing for heatset dryers is not required if it is demonstrated that pressure in the dryer is negative relative to the surrounding press room and the airflow is into the dryer. This test may be performed with a differential pressure gauge or an airflow direction indicator (e.g., smoke stick or aluminum ribbons).

3. EPA Method 1 or 1A, as appropriate, shall be used to select the sampling sites.

4. EPA Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the velocity and volumetric flow rate of the exhaust stream.

5. EPA Method 3 or 3A, as appropriate, shall be used to determine the concentration of oxygen (O_2) and carbon dioxide (CO_2).

6. EPA Method 4 shall be used to determine moisture content.

7. EPA Method 18, 25, or 25A shall be used to determine the VOC concentration of the exhaust stream entering and exiting the control device, unless the alternate limit in paragraph (3)(C)2. of this rule is being used for compliance, in which case only the VOC concentration of the exit exhaust shall be determined. In cases where the anticipated outlet VOC concentration of the control device is less than fifty (50) ppmv as carbon, EPA Method 25A shall be used.

8. If EPA Method 25A is used—

A. The outlet readings from a thermal or catalytic oxidizer may be corrected by using EPA Method 18 or 25 to determine non-VOC components (methane and ethane) and subtracting these from the Method 25A result; and

B. The director may require a retest by EPA Method 18 or 25 if the average corrected outlet reading is greater than fifty (50) ppmv VOC as carbon.

9. A compliance test shall consist of up to three (3) separate runs, each lasting a minimum of sixty (60) minutes, unless the director determines that the circumstances dictate shorter sampling times.

10. EPA Method 25 specifies a minimum probe temperature of two hundred sixty-five degrees Fahrenheit (265 °F). To prevent condensation, the probe should be heated to at least the gas stream temperature, typically close to three hundred fifty degrees Fahrenheit (350 °F).

11. EPA Method 25A specifies a minimum temperature of two hundred twenty degrees Fahrenheit (220 °F) for the sampling components leading to the analyzer. To prevent condensation when testing heatset printing presses, the sampling components and flame ionization detector lock should be heated to at least the gas stream temperature, typically close to three hundred fifty degrees Fahrenheit (350 °F).

12. The oxidizer operating temperature or the temperature of the gas upstream of the catalyst bed may be used as the operating parameter for determining continuous compliance with the emission standard of subsection (3)(C) of this rule. This temperature shall be computed as the time-weighted average of the temperature values recorded during the test. The owner or operator must maintain the oxidizer at a three (3)-hour average temperature no less than fifty degrees Fahrenheit (50 °F) below the average temperature observed during the most recent stack test to demonstrate continuous compliance.

13. Use of an adaptation to any of the methods specified in this subsection may be approved by the director on a case-by-case basis. The owner or operator shall submit sufficient documentation for the director to find that the methods specified in this subsection will yield inaccurate results and that the proposed adaptation is appropriate.

(B) Control Device Inspection. For catalytic oxidizers, the catalyst bed material shall be inspected annually for general catalyst condition and any signs of potential catalyst depletion. The owner or operator shall also collect a representative sample of the catalyst from the oxidizer, per manufacturer's recommendations, and have it tested to evaluate the catalyst's capability to continue to function at or above the required control efficiency. An evaluation of the catalyst bed material shall be conducted whenever the results of the inspection indicate signs of potential catalyst depletion or poor catalyst condition based on manufacturer's recommendations, but not less than once per year.

(C) VOC Content Testing.

1. Fountain solutions. Compliance with the VOC content limits for fountain solutions established in subsection (3)(A) of this rule shall be determined by one (1) of the following:

A. If fountain solution is diluted prior to use, a calculation that combines EPA Method 24 analytical data for the concentrated materials used to prepare the fountain solution and the proportions in which they are mixed to make the as-applied material. The analysis of the concentrated materials may be performed by the supplier of those materials. Owners or operators may use formulation information provided with the concentrated materials used to prepare the fountain solution, such as the container label, the product data sheet, or the MSDS sheet to document the VOC content of the concentrated material;

B. If fountain solution is not diluted prior to use, MSDS or manufacturer's formulation data sheet may be used; or

C. EPA Method 24 of a sample of fountain solution, as applied.

2. Cleaning solutions. The VOC content or VOC composite partial vapor pressure of cleaning solutions shall be determined by one (1) of the following:

A. Analysis by EPA Method 24 for VOC content or by an appropriate method for VOC composite partial vapor pressure of a sample of the cleaning solution. See formula in paragraph (5)(C)3. of this rule. The analysis may be performed by the supplier of those materials; or

B. Calculation for VOC content that combines EPA Method 24 analytical data for the concentrated materials used to prepare the cleaning solution and the proportions in which they are mixed to make the cleaning solution as applied. Owners or operators may use formulation information provided with the concentrated materials used to prepare the cleaning solution, such as the container label, the product data sheet, or the MSDS sheet to document the VOC content of the concentrated material;

C. If cleaning solution is not diluted prior to use, MSDS or manufacturer's formulation data sheet may be used.

3. Calculations. The VOC composite partial vapor pressure is the sum of the partial pressure of the compounds defined as VOCs. VOC composite partial vapor pressure is calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the i^{th} VOC compound, in grams
W_w = Weight of water, in grams
W_c = Weight of exempt compound, in grams
MW_i = Molecular weight of the i^{th} VOC compound, in g/g-mole
MW_w = Molecular weight of water, in g/g-mole
MW_c = Molecular weight of exempt compound, in g/g-mole
n = Number of VOC compounds
PP_c = VOC composite partial vapor pressure at 20 °C (68 °F), in mmHg
VP_i = Vapor pressure of the i^{th} VOC compound at 20 °C (68 °F), in mmHg

(D) VOC Emission Calculations, Retention Factors, and Capture Efficiencies. For purposes of determining VOC emissions from lithographic and letterpress printing operations, the following retention factors and capture efficiencies and formula shall be used:

1. A portion of the VOC contained in inks and cleaning solution is retained in the printed web or in the shop towels used for cleaning. The following retention factors shall be used:

A. For heatset inks printed on absorptive substrates, a twenty percent (20%) VOC retention factor shall be used meaning eighty percent (80%) of the VOC in the ink is emitted during the printing process and is available for capture and control by an add-on pollution control device;

B. For sheet-fed and non-heatset web inks printed on absorptive substrates, a ninety-five percent (95%) VOC retention factor shall be used, meaning five percent (5%) of the VOC in the ink is emitted during the printing process; and

C. For cleaning solution VOC emissions from shop towels using cleaning solutions with a VOC composite vapor pressure of no more than ten (10) mmHg at twenty degrees Celsius (20 °C) (sixty-eight degrees Fahrenheit (68 °F)), a fifty percent (50%) VOC retention factor shall be used if the contaminated shop towels are kept in closed containers;

2. A portion of the VOC contained in inks, fountain solutions, and automatic blanket washes on heatset presses is captured in the press dryer for control by add-on pollution control devices. The following capture factors shall be used:

A. For inks, a one hundred percent (100%) VOC capture efficiency shall be used. All the VOC in the ink that is not retained is assumed to be volatilized in the press dryer if it is demonstrated that the pressure in the dryer is negative relative to the surrounding press room and the airflow is into the dryer;

B. For fountain solutions containing alcohol substitutes, a seventy percent (70%) VOC capture factor shall be used; and

C. For automatic blanket wash solutions with a VOC composite partial vapor pressure of no more than ten (10) mmHg at twenty degrees Celsius (20 °C) (sixty-eight degrees Fahrenheit (68 °F)), a forty percent (40%) VOC capture factor shall be used; and

3. For calculating VOC emissions, the following equations shall be used:

A. For total VOC emissions from an offset lithographic printing facility, including all related cleaning activities—

$$VOC_{TOT} = \sum_{i=1}^{m} W_{INK_i} * VOC_{INK_i} * \left(1 - \frac{RF_{INK_i}}{100}\right) + \sum_{i=1}^{n} VOL_{FS_i} * VOC_{FS_i} + \sum_{i=1}^{p} VOL_{CS_i} * VOC_{CS_i} * \left(1 - \frac{RF_{CS_i}}{100}\right)$$

Where:

VOC_{TOT} = Total VOC emissions, expressed as pounds
W_{INK} = Weight of ink used, expressed as pounds
VOC_{INK} = Weight fraction of VOC in the ink
RF_{INK} = Retention factor of the ink, expressed as a percent
m = Number of inks
VOL_{FS} = Volume of fountain solution used, expressed as gallons
VOC_{FS} = VOC content of fountain solution, expressed as pounds per gallon
n = Number of fountain solutions
VOL_{CS} = Volume of cleaning solution used, expressed as gallons
VOC_{CS} = VOC content of cleaning solution, expressed as pounds per gallon
RF_{CS} = Retention factor of the cleaning solution, expressed as a percent
p = Number of cleaning solutions

and

B. For VOC ink oil emissions from a heatset web lithographic or letterpress printing press—

$$VOC_{TOT} = \sum_{i=1}^{n} W_{INK_i} * VOC_{INK_i} * \left(1 - \frac{RF_{INK_i}}{100}\right)$$

Where:

VOC_{TOT} = Total VOC emissions, expressed as pounds
W_{INK} = Weight of ink used, expressed as pounds
VOC_{INK} = Weight fraction of VOC in the ink
RF_{INK} = Retention factor of the ink, expressed as a percent
n = Number of inks

(E) Material Use Guidance: Applicability Determination. Based on EPA's *Potential to Emit (PTE) Guidance for Specific Source Categories* (April 14, 1998) and the equations of paragraph (5)(D)3. of this rule, the methods in this subsection may be used for determining if a facility or press meets the corresponding applicability thresholds.

1. For determining if a facility meets the applicability limits of subsection (1)(B) of this rule, the material use thresholds are as follows:

Type of Printing Operation	12-Month Rolling Material Use Threshold
Sheet-fed	768 gallons of cleaning solvent and fountain solution additives
Non-heatset Web	768 gallons of cleaning solvent and fountain solution additives
Heatset Web	5,400 pounds of ink, cleaning solvent, and fountain solution additives

2. For determining if a web heatset press is subject to subsection (3)(C) of this rule, the material use thresholds are as follows:

Type of Printing Press	Annual Material Use Threshold
Heatset Web	55,800 pounds of ink

AUTHORITY: section 643.050, RSMo [1994] 2000. Original rule filed Oct. 7, 1994, effective May 28, 1995. Amended: Filed Nov. 30, 2010.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will cost private entities $6,976,330 in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

FISCAL NOTE
PRIVATE COST

I. **Department Title:** 10 – Department of Natural Resources
Division Title: 10 – Air Conservation Commission
Chapter Title: 5 – Air Quality Standards and Air Pollution Control Rules Specific to the St. Louis Metropolitan Area

Rule Number and Title:	10 CSR 10-5.442 Control of Emissions from Lithographic Printing Operations
Type of Rulemaking:	Amendment to Existing Rule

II. **SUMMARY OF FISCAL IMPACT**

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
35	Offset Lithography North American Industry Classification System code (NAICS): 323110 Standard Industry Classification code (SIC): 2752 Source Classification Codes (SCC): 40500401, 40500411, 40500412, 40500415, 40500416, 40500418	$6,840,350
2	Letterpress Printing NAICS: 323119 SIC: 2751 SCC: 40500201, 40500202, 40500203, 40500211, 40500212, 40500215	$135,980
		$6,976,330

II. **WORKSHEET**

Offset Lithographic

Proposed Rule Provisions	Estimated # of applicable facilities	Average Annual Cost (per facility)	Total Annual Cost of compliance	Total Cost of compliance over life of rule
VOC Emission Controls (Device, Capital recovery, operation & maintenance)	2	$223,035	$446,070	$4,460,700
Fountain Solutions (See Assumption 9)	35	$0	$0	$0
Cleaning	35	$6799	$237,965	$2,379,650
Total		$229,834	$684,035	**$6,840,350**

Letterpress Printing

Proposed Rule Provision incurring compliance costs	Estimated # of applicable facilities	Average Annual Cost (per facility)	Total Annual Cost of compliance	Total Cost of compliance over life of rule
VOC Emission Controls (Device, Capital recovery, operation & maintenance)	0	$223,035	$0	$0
Cleaning	2	$6,799	$13,598	$135,980
Total		$6,799	$13,598	**$135,980**

IV. ASSUMPTIONS

1. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be 10 years although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.
2. Since this rule amendment is substantially similar to the emission limits and techniques presented in the U.S. Environmental Protection Agency's (EPA) *Control Techniques Guidelines* (CTG) *for Offset Lithographic Printing and Letterpress Printing* (EPA-453/R-06-002, September 2006), this private entity fiscal cost analysis is based on the CTG cost estimates outlined in Appendix D of that document.
3. All costs are annualized. The capital recovery of the initial equipment and installation costs is part of the annual cost and is based on a 10-percent interest rate and a 10-year life for the equipment.
4. All figures are in 2005 dollars matching EPA's cost analysis.
5. EPA used a model plant analysis that estimated that 148 facilities nationally will have to add heatset dryer Volatile Organic Compound (VOC) emission controls costing $33 million annually. These 148 plants were distributed among four categories. The cost to install controls, based on the average of all the categories, is $223,035 per plant per year.
6. For the lithographic cleaning provisions, EPA estimated that there are 2698 applicable facilities nationwide, divided into 16 categories, in nonattainment areas that were not previously meeting the cleaning provisions. Nationally, the annual cost of compliance with the cleaning provisions was estimated to be $18 million. From this, the average annual cost per facility is $6799.
7. 2 heatset lithographic facilities will have presses requiring the installation of VOC control devices.
8. 35 lithographic facilities will now have to comply with the low VOC solvent cleaning and fountain solution provisions.
9. For the fountain solution provisions requiring a reduction in alcohol use or conversion to alcohol substitutes, the net cost is $0 because any savings are offset by the installation and maintenance of conversion equipment to include new rubber rollers and any necessary water pretreatment conditioners.

10. 2 letterpress operations will have to comply with the cleaning provisions but no letterpress operations will have to install heatset dryer controls.
11. Costs per facility are the same for letterpress printing as for offset lithography, except that there are no fountain solutions in letterpress printing.
12. No additional recordkeeping costs will be incurred. Affected facilities are either already maintaining appropriate records or additional recordkeeping costs are negligible.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 5—Air Quality Standards and Air Pollution Control Rules Specific to the St. Louis Metropolitan Area

PROPOSED AMENDMENT

10 CSR 10-5.455 Control of Emissions from *Industrial* Solvent *[Cleanup] Cleaning* Operations. The commission proposes to amend the rule title, rule purpose, and section (3) and renumber and amend sections (1), (2), (4), and (5) of the rule. If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule will reduce the volatile organic compounds (VOC) emissions from industrial cleaning operations that use organic solvents. This amendment will lower the allowable emissions threshold for VOCs released per day from the use, storage, and disposal of industrial cleaning solvents. It will also add requirements for facilities that have VOC emission levels that exceed the threshold, including placing limitations on the VOC content of the cleaning materials. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the publication by the U.S. Environmental Protection Agency 2006 Control Techniques Guidelines for industrial cleaning operations and Clean Air Act section 182(b)(2).

PURPOSE: This rule will reduce [solvent emissions from solvent cleanup operations] ***the volatile organic compounds emissions from industrial cleaning operations that use organic solvents****.*

[(1) Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.]

*[(2)]***(1)** Applicability.

(A) This rule shall apply throughout St. Louis City and the Counties of Jefferson, St. Charles, Franklin, and St. Louis.

(B) This rule shall apply to any person who performs or allows the performance of any cleaning operation involving the use of *[a volatile]* organic *[compound (VOC)]* solvents or solvent solutions. **Except as provided in subsections (1)(C) through (1)(E) of this rule, the** *[The]* provisions of this rule shall *[not]* apply to any stationary source *[at which cleaning solvent VOCs are emitted at less than five hundred (500) pounds per day.]* **that emits at least three (3) tons per twelve (12)-month rolling period or more of volatile organic compounds (VOCs) from cleaning operations at the source, in the absence of air pollution control equipment, and stores and/or disposes of these solvent materials.**

(C) The following **solvent** cleaning operations are not subject to the provisions of this rule:

1. Cold cleaner;
2. Open top vapor degreaser;
3. Conveyorized cold cleaner;
4. Conveyorized vapor degreaser;

5. Stripping of cured coatings, cured ink, or cured adhesives;

6. Cleaning operation in printing pre-press or graphic arts pre-press area, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning;

*[5.]***7.** Nonmanufacturing area cleaning. Nonmanufacturing areas include cafeterias, laboratories, pilot facilities, restrooms, **janitorial cleaning, including graffiti removal,** and office buildings; **and**

[6. Cleaning operations for which there has been made a best available control technology (BACT), reasonably available control technology (RACT), or lowest achievable emission rate (LAER) determination; and]

*[7.]***8.** Cleaning operations *[which are subject to the Aerospace National Emission Standards for Hazardous Air Pollutants Standards (NESHAP) source category.]* **for emission units within the following source categories listed for regulation under section 183(e) of the Clean Air Act:**

A. Aerospace coatings;
B. Auto and light duty truck assembly coatings;
C. Fiberglass boat manufacturing materials;
D. Flat wood paneling coatings;
E. Flexible packaging printing materials;
F. Large appliance coatings;
G. Letterpress printing materials;
H. Lithographic printing materials;
I. Metal furniture coatings;
J. Miscellaneous industrial adhesives;
K. Miscellaneous metals parts coatings;
L. Paper, film, and foil coatings;
M. Plastic parts coatings;
N. Shipbuilding and repair coatings; and
O. Wood furniture coatings.

(D) The following solvent cleaning operations are exempt from the VOC-content limitations specified in subsection (3)(A) of this rule:

1. Cleaning of solar cells, laser hardware, scientific instruments, and high-precision optics;

2. Cleaning conducted as part of the following: performance laboratory tests on coatings, adhesives, or inks; research and development programs; and laboratory tests in quality assurance laboratories;

3. Cleaning of paper-based gaskets and clutch assemblies where rubber is bonded to metal by means of an adhesive;

4. Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics;

5. Cleaning at medical device and pharmaceutical facilities using up to one and one-half (1.5) gallons per day of solvents;

6. Cleaning of adhesive application equipment used for thin metal laminating;

7. Cleaning of electronic or electrical cables;

8. Touch-up cleaning performed on printed circuit boards where surface mounted devices have already been attached;

9. Cleaning of coating and adhesive application processes utilized to manufacture transdermal drug delivery product using less than three (3) gallons per day of ethyl acetate;

10. Cleaning of application equipment used to apply coating on satellites and radiation effect coatings;

11. Cleaning of application equipment used to apply solvent-borne fluoropolymer coatings;

12. Cleaning of ultraviolet or electron beam adhesive application;

13. Cleaning of sterilization indicating ink application equipment if the facility uses less than one and one-half (1.5) gallons per day of solvents for such cleaning;

14. Cleaning of metering rollers, dampening rollers, and printing plates;

15. Cleaning of numismatic dies; and

16. Cleaning of operations associated with digital printing.

(E) Cleaning with aerosol products shall be exempt from the requirements of subsection (3)(A) of this rule if the facility uses one and one-quarter (1.25) gallons (one hundred sixty (160) fluid ounces) or less of the aerosol products per day.

(2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.

(3) General Provisions. *[Any person performing any industrial cleaning operation, not excluded in subsection (2)(B) or (C), involving the use of a VOC solvent or solvent solution shall demonstrate a thirty percent (30%) reduction in plant-wide industrial VOC cleaning solvent emissions as described in section (4) of this rule by May 31, 1996.]*

(A) VOC-Content Limitations. No owner or operator of a source subject to this rule shall perform any cleaning operation subject to this rule unless the owner or operator meets the requirements in paragraph (3)(A)1., (3)(A)2., or (3)(A)3. of this rule—

1. The VOC content of the as-used cleaning solutions (minus water and exempt compounds) shall not exceed the following emissions limitations:

A. Product cleaning during manufacturing process or surface preparation for coating, adhesive, or ink application.

Solvent Cleaning Operation	VOC Emission Limit	
	Kilograms per liter	Pounds per gallon
Electrical apparatus components and electronic components	0.10	0.83
Medical devices and pharmaceuticals	0.80	6.70

B. Repair and maintenance cleaning.

Solvent Cleaning Operation	VOC Emission Limit	
	Kilograms per liter	Pounds per gallon
Electrical apparatus components and electronic components	0.10	0.83
Medical devices and pharmaceuticals: tools, equipment, and machinery	0.80	6.70
Medical devices and pharmaceuticals: general work surfaces	0.60	5.00

C. Cleaning of ink application equipment.

Solvent Cleaning Operation	VOC Emission Limit	
	Kilograms per liter	Pounds per gallon
Rotogravure printing that does not print flexible packaging	0.10	0.83
Screen printing	0.50	4.20
Ultraviolet ink and electro beam ink application equipment, except screen printing	0.65	5.40
Flexographic printing that does not print flexible packaging	0.10	0.83

D. All other solvent cleaning operations.

Solvent Cleaning Operation	VOC Emission Limit	
	Kilograms per liter	Pounds per gallon
All other solvent cleaning operations not subject to specific limitations in paragraphs (3)(A)1., (3)(A)2., or (3)(A)3. of this rule	0.05	0.42

2. The composite vapor pressure of each as-used cleaning solution used does not exceed eight millimeters of Mercury (8.0 mmHg) measured at twenty degrees Celcius (20 °C) (sixty-eight degrees Fahrenheit (68 °F)); or

3. An oxidizer or carbon adsorber is installed and operated that reduces VOC emissions from the subject cleaning operation by at least eighty-five percent (85%) overall. The owner or operator may use an emission control system other than an afterburner or carbon adsorber if such device reduces VOC emission from the subject cleaning operation by at least eighty-five percent (85%) by mass, the owner or operator submits a plan to the director detailing appropriate monitoring devices, test methods, record-keeping requirements, and operation parameters for such a control device, and such a plan is approved by the director and the U.S. Environmental Protection Agency (EPA) within federally-enforceable permit conditions.

(B) Cleaning Devices and Methods. The owner or operator of a facility that is subject to this rule shall employ one (1) or more of the following cleaning devices and methods:

1. Wipe cleaning;

2. Closed containers or hand-held spray bottles from which solvents are applied;

3. Cleaning equipment which has a solvent container that can be, and is, closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself; and

4. Remote reservoir cleaner, if the operator of the cleaner complies with all of the following:

A. Prevents solvent vapors from escaping from the solvent container by using such devices as a cover or a valve when the remote reservoir is not being used, cleaned, or repaired;

B. Directs solvent flow in a manner that will prevent liquid solvent from splashing outside of the remote reservoir cleaner;

C. Does not clean porous or absorbent materials, such as cloth, leather, wood, or rope;

D. Uses only solvent containers free of all liquid leaks. Auxiliary equipment, such as pumps, pipelines, or flanges, shall not have any liquid leaks, visible tears, or cracks. Any liquid leak, visible tear, or crack detected shall be repaired within one (1) calendar day, or the leaking section of the remote reservoir cold cleaner shall be drained of all solvent and shut down until it is repaired or replaced;

E. Non-atomized solvent flow method where the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; and

F. Solvent flushing method where the cleaning solvent is discharged into a container which is closed except for solvent collection openings, and, if necessary, other openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure or by pumping.

(C) Operating Requirements. The owner or operator of a source subject to the requirements of this section shall comply with the following for each subject cleaning operation:

1. Cover all open containers and properly cover and store applicators used to apply cleaning solvents;

2. Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers that are nonleaking and nonabsorbent;

3. Minimize air circulation around the cleaning operation; and

4. Utilize equipment practices that minimize emissions.

(D) Control Device Inspection. For catalytic oxidizers, the catalyst bed material shall be inspected annually for general catalyst condition and any signs of potential catalyst depletion. The owner or operator shall also collect a representative sample of the catalyst from the oxidizer, per manufacturer's recommendations, and have it tested to evaluate the catalyst's capability to continue to function at or above the required control efficiency. An evaluation of the catalyst bed material shall be conducted whenever the results of the inspection indicate signs of potential catalyst depletion or poor catalyst condition based on manufacturer's recommendations but not less than once per year.

[(4) Solvent Emission Reduction. The following provisions apply to any stationary source subject to section (3) of this rule:

(A) A thirty percent (30%) emission reduction shall be based on emissions in 1990 and in 1995. If the owner/operator demonstrates that either 1990 or 1995 is not a representative production year, then a demonstration shall be made to the agency that another year is more representative for purposes of comparison or for prorating cleaning solvent usage. The following applicable documentation of actions and associated emission reductions shall be sent to the department for approval by March 1, 1996:

1. Changes in cleaning solvents used;

2. Changes in work practices; and

3. Changes in equipment or processes; and

(B) The changes described in subsection (4)(A) of this rule shall remain in effect until other changes resulting in greater, or equal, emission reductions from the cleaning operations are implemented.]

[(5) Recordkeeping. The person responsible for industrial cleaning operations at an affected facility seeking to comply with section (3) of this rule shall keep records of information sufficient for the calculation of emissions from each Unit Operation System (UOS) from the use of industrial cleaning solvents. A UOS consists of an industrial cleaning operation around which all organic solvent usage disposal, and fugitive losses may be calculated using a simple mass balance equation. As an aid to compliance with this section, records for industrial cleaning UOSs may include one (1) or more of the following:

(A) Engineering drawings or sketches of all UOSs used to define industrial cleaning operations within the facility, including a system boundary, organic solvent input(s), organic solvent output(s), and organic solvent evaporative loss points. These drawings shall include each of the following:

1. Labeled boxes within the system boundary which describe all components of the UOS, including any virgin solvent containers, solvent applicators, used solvent containers, and the surface being cleaned;

2. Numbered or lettered arrows depicting liquid and/or evaporative solvent flow, accurate with respect to relative mass flow rates in and out of the system boundary; and

3. Arrows depicting all organic solvent pathways within the system boundary;

(B) One (1) accurate mass balance equation for each UOS depicted in subsection (5)(A) of this rule. Each equation shall have variables consistent with those used to define the corresponding UOS and shall be solved for total VOC emissions for the UOS; and

(C) Any assumptions or approximations made in defining the UOSs.]

(4) Reporting and Record Keeping. All owners and operators subject to this rule shall maintain records as required by this section sufficient to determine continuous compliance with this rule. These records shall be kept for at least five (5) years to be automatically extended if enforcement action is pending. These records shall be made available immediately upon request for review by the Department of Natural Resources' personnel and other air pollution control agencies upon presentation of proper credentials.

(A) The owner or operator of a facility that includes an industrial solvent cleaning operation shall keep records detailing specific VOC uses as necessary for the director to determine monthly compliance. All facility records must include the following:

1. A list of all solvents currently used and/or stored at the site. The list shall include the following information:

A. Cleaning solvent type by name/code/manufacturer;

B. The actual VOC content of the cleaning solvents, based upon EPA Method 24, of each cleaning material, in pounds per gallon of material, as applied or the VOC composite partial vapor pressures of the solvents or solvent solutions used in the industrial cleaning operations. This calculation need only be performed once for each batch of cleaning solution used; and

C. The actual mixing ratio for the cleaning solvent as applied; and

2. Records of usage including the following information:

A. Monthly records of total applied volume in gallons for each cleaning solvent used;

B. Monthly records of solvent cleaning activity associated with each solvent used;

C. Monthly records of total volume of aerosol products in ounces used; and

D. The total monthly VOC emissions (summation of gallons × VOC content (in pounds per gallon)).

(B) If a facility includes automatic equipment, records shall also include, as applicable, the following:

1. For a source with automatic equipment that prepares each batch of cleaning solution(s) on site, records for each batch shall include:

A. The name and identification of each cleaning solution;

B. The VOC content of each cleaning solvent in the cleaning solution;

C. Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and description of changes to the proportion of cleaning solvent and water (or other non-VOC);

D. The proportion of each cleaning solvent and water (or other non-VOC) used to prepare the as-used cleaning solution;

E. The VOC content of the as-used cleaning solution, with the supporting calculations; and

F. A calibration log for the automatic equipment, detailing periodic checks;

2. For a source with automatic equipment that does not prepare cleaning solution(s) on site, records for each batch of cleaning solution shall include:

A. The name and identification of each cleaning solution;

B. Date, time of preparation, and each subsequent modification of the batch;

C. The VOC content of each cleaning solvent in the cleaning solution;

D. The total amount of each cleaning solvent and water (or other non-VOC) used to prepare the as-used cleaning solution; and

E. The VOC content of the as-used cleaning solution, with supporting calculations; and

3. For cleaning solutions that are not prepared at the site, but are used as-purchased, the manufacturer's specifications for VOC content may be used if such manufacturer's specifications are based on the results of tests of the VOC content in accordance with EPA Method 24.

(C) Any owner or operator using an emission control device pursuant to this rule shall maintain records, on a daily basis, of key system operating parameters for emission control equipment, including, but not limited to:

1. Identification of the type of emissions control system used;

2. Hours of operation;

3. Routine and non-routine maintenance, including dates and duration of any outages;

4. Records of test reports conducted;

5. If an owner or operator of a solvent cleaning operation employs a thermal oxidizer or catalytic oxidizer to achieve and maintain compliance, the owner or operator shall comply with the following requirements:

A. Continuous temperature monitoring and continuous temperature recording equipment shall be installed and operated to accurately measure the operating temperature(s) for the control device; and

B. The following information shall be collected and recorded each day of operation of the solvent cleaning operation and the control device, and the information shall be maintained at the facility for a period of five (5) years:

(I) A log or record of the operating time for the control device, monitoring equipment, and the associated solvent cleaning operation;

(II) For thermal oxidizers, all three (3)-hour periods of operation during which the average combustion temperature was more than fifty degrees Fahrenheit (50 °F) below the average combustion temperature during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance; and

(III) For catalytic oxidizers, all three (3)-hour periods of operation during which the average temperature of the dryer exhaust gases immediately before the catalyst bed was more than fifty degrees Fahrenheit (50 °F) below the average temperature of the dryer exhaust gases during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance, and all three (3)-hour periods during which the average temperature difference across the catalyst bed was less than eighty percent (80%) of the average temperature difference during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance; and

6. If an owner or operator of a solvent cleaning operation employs a carbon adsorption system to achieve and maintain compliance, the owner or operator shall comply with the following requirements:

A. Monitoring and recording equipment that records all of the following shall be installed and operated for the carbon adsorption system:

(I) A continuous emission monitoring and recording system that is capable of accurately measuring and recording the concentration of organic compounds in the exhaust gases from the carbon adsorption system;

(II) Monitoring and recording equipment that are capable of accurately measuring and recording the total mass steam flow rate for each regeneration cycle of each carbon bed; and

(III) Monitoring and recording equipment that are capable of accurately measuring and recording the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)); and

B. The following information shall be collected and recorded each day of operation of the solvent cleaning operation and the carbon adsorption system:

(I) A log or record of the operating time for the carbon adsorption system, monitoring equipment, and the associated solvent cleaning operation;

(II) For a carbon adsorption system that employs a continuous emission monitoring and recording system to measure and record the concentration of organic compounds in the exhaust gases, all three (3)-hour periods of operation during which the average concentration level or reading in the exhaust gases is more than twenty percent (20%) greater than the exhaust gas organic compound concentration level or reading measured by the most recent performance test that demonstrated that the solvent cleaning operation was in compliance;

(III) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the total mass steam flow rate for each regeneration cycle of each carbon bed, all carbon bed regeneration cycles during which the total mass steam flow rate was more than ten percent (10%) below the total mass steam flow rate during the most recent performance test that demonstrated that the solvent cleaning operation was in compliance; and

(IV) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)) was more than ten percent (10%) greater than the carbon bed temperature during the most recent performance test that demonstrated that the solvent cleaning operation was in compliance.

(5) Test Methods. Certain test methods mentioned in this rule may be found in 10 CSR 10-6.030. Other EPA test methods specific to this rule may be found in 40 CFR 60, Appendix A.

(A) Control Efficiency Testing. To demonstrate compliance with the emission limits of subsection (3)(C) of this rule, an initial emission test shall be performed after any required control equipment is installed. The emission limits shall not have been met until compliance has been verified through this testing. Testing shall also be required after significant modifications to any control equipment required by this rule. Significant modifications include any repairs or changes that might substantially alter or affect the overall control efficiency. This subsection outlines the methods to be used for any such testing.

1. The emission unit shall be run at typical operating conditions and flow rates compatible with scheduled production during any emission testing.

2. EPA Method 1 or 1A, as appropriate, shall be used to select the sampling sites.

3. EPA Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the velocity and volumetric flow rate of the exhaust stream.

4. EPA Method 3 or 3A, as appropriate, shall be used to determine the concentration of Oxygen (O_2) and Carbon Dioxide (CO_2).

5. EPA Method 4 shall be used to determine moisture content.

6. EPA Method 18, 25, or 25A shall be used to determine the VOC concentration of the exhaust stream entering and exiting the control device, unless the alternate limit in paragraph (3)(C)2. of this rule is being used for compliance, in which case only the VOC concentration of the exit exhaust shall be determined. In cases where the anticipated outlet VOC concentration of the control device is less than fifty parts per million by volume (50 ppmv) as carbon, EPA Method 25A shall be used.

7. If EPA Method 25A is used—

A. The outlet readings from a thermal or catalytic oxidizer may be corrected by using EPA Method 18 or 25 to determine non-VOC components (methane and ethane) and subtracting these from the Method 25A result; and

B. The director may require a retest by EPA Method 18 or 25 if the average corrected outlet reading is greater than fifty (50) ppmv VOC as carbon.

8. A compliance test shall consist of up to three (3) separate runs, each lasting a minimum of sixty (60) minutes unless the director determines that the circumstances dictate shorter sampling times.

9. EPA Method 25 specifies a minimum probe temperature of two hundred sixty-five degrees Fahrenheit (265 °F). To prevent condensation, the probe should be heated to at least the gas stream temperature, typically close to three hundred fifty degrees Fahrenheit (350 °F).

10. EPA Method 25A specifies a minimum temperature of two hundred twenty degrees Fahrenheit (220 °F) for the sampling components leading to the analyzer. To prevent condensation when testing heatset printing presses, the sampling components and flame ionization detector lock should be heated to at least the gas stream temperature, typically close to three hundred fifty degrees Fahrenheit (350 °F).

11. The oxidizer operating temperature or the temperature of the gas upstream of the catalyst bed may be used as the operating parameter for determining continuous compliance with the emission standard of subsection (3)(C) of this rule. This temperature shall be computed as the time-weighted average of the temperature values recorded during the test. The owner or operator must maintain the oxidizer at a three (3)-hour average temperature no less than fifty degrees Fahrenheit (50 °F) below the average temperature observed during the most recent stack test to demonstrate continuous compliance.

12. Use of an adaptation to any of the methods specified in this subsection may be approved by the director on a case-by-case basis. The owner or operator shall submit sufficient documentation for the director to find that the methods specified in this subsection will yield inaccurate results and that the proposed adaptation is appropriate.

13. To determine capture efficiency, use the procedure in 10 CSR 10-6.030(20).

(B) VOC Content Testing for Cleaning Solutions. The VOC content or VOC composite partial vapor pressure of cleaning solutions shall be determined by one (1) of the following:

1. Analysis by EPA Method 24 for VOC content or by an appropriate method for VOC composite partial vapor pressure of a sample of the cleaning solution. The analysis may be performed by the supplier of those materials;

2. Calculation for VOC content that combines EPA Method 24 analytical data for the concentrated materials used to prepare the cleaning solution and the proportions in which they are mixed to make the cleaning solution as applied. Owners or operators may use formulation information provided with the concentrated materials used to prepare the cleaning solution, such as the container label, the product data sheet, or the Material Safety Data Sheet (MSDS) to document the VOC content of the concentrated material; or

3. If cleaning is not diluted prior to use, MSDS or manufacturer's formulation data sheet may be used.

*AUTHORITY: section 643.050, RSMo Supp. [1995] **2010**. Original rule filed Oct. 7, 1994, effective May 28, 1995. Amended: Filed July 15, 1996, effective Feb. 28, 1997. Amended: Filed Nov. 30, 2010.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

PROPOSED AMENDMENT

10 CSR 10-6.020 Definitions and Common Reference Tables. The commission proposes to amend subsections (2)(A)–(2)(J) and (2)(L)–(2)(W). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule defines key words and expressions used in Chapters 1 through 6 and provides common reference tables. This amendment will add all of the definitions currently found in individual Division 10 air rules into the general definitions rule unless a specific reason exists for a definition to be unique to a specific rule. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is public hearing testimony.

*PURPOSE: This rule defines key words and expressions used in [c]**C**hapters 1 through 6 and provides common reference tables.*

(2) Definitions.

(A) All terms beginning with "A."

1. Abatement project designer—An individual who designs or plans Asbestos Hazard Emergency Response Act (AHERA) asbestos abatement.

2. Account certificate of representation—The completed and signed submission for certifying the designation of a nitrogen oxides (NO_x) authorized account representative for an affected unit or a group of identified affected units who is authorized to represent the owners or operators of such unit(s) and of the affected units at such source(s) with regard to matters under an NO_x trading program.

3. Account holder—Any person that chooses to participate in the program by generating, buying, selling, or trading emission reduction credits (ERCs).

4. Account number—The identification number given to each NO_x allowance tracking system account.

5. Acid rain emissions limitation—As defined in 40 CFR 72.2, a limitation on emissions of sulfur dioxide or nitrogen

oxides under the acid rain program under Title IV of the Clean Air Act.

6. Acrylonitrile-butadiene-styrene (ABS) plastic solvent welding—A process to weld ABS pipe.

*[2.]***7.** Act—The Clean Air Act, 42 U.S.C. 7401. References to the word Title pertain to the titles of the Clean Air Act Amendments of 1990, P.L. 101–595.

8. Active collection system—A gas collection system that uses gas mover equipment.

9. Active landfill—A landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

*[3.]***10.** Actual emissions—The actual rate of emissions of a pollutant from a source operation is determined as follows:

A. Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the source operation or installation actually emitted the pollutant during the previous two (2)-year period and which represents normal operation. A different time period for averaging may be used if the director determines it to be more representative. Actual emissions shall be calculated using actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period;

B. The director may presume that source-specific allowable emissions for a source operation or installation are equivalent to the actual emissions of the source operation or installation; and

C. For source operations or installations which have not begun normal operations on the particular date, actual emissions shall equal the potential emissions of the source operation or installation on that date.

*[4.]***11.** Adequately wet—To sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

12. Adhesion primer—A coating that is applied to a polyolefin part to promote the adhesion of a subsequent coating. An adhesion prime is clearly identified as an adhesion prime or adhesion promoter on its material safety data sheet.

13. Adhesive—Any chemical substance that is applied for the purpose of bonding two (2) surfaces together other than by mechanical means. For the purpose of 10 CSR 10-5.330 only, an adhesive is considered a surface coating.

14. Adhesive application process—A series of one (1) or more adhesive applicators and any associated drying area and/or oven wherein an adhesive is applied, dried, and/or cured. An application process ends at the point where the adhesive is dried or cured, or prior to any subsequent application of a different adhesive. It is not necessary for an application process to have an oven or flash-off area.

15. Adhesive primer—A product intended by the manufacturer for application to a substrate, prior to the application of an adhesive, to provide a bonding surface.

*[5.]***16.** Administrator—The regional administrator for Region VII, U.S. Environmental Protection Agency (EPA). **For the purpose of 10 CSR 10-6.360 only, administrator is the administrator of the U.S. Environmental Protection Agency or the administrator's duly-authorized representative.**

*[6.]***17.** Adsorption cycle—The period during which the adsorption system is adsorbing and not desorbing.

*[7.]***18.** Adverse impact on visibility—The visibility impairment which interferes with the protection, preservation, management, or enjoyment of the visitor's visual experience of a Class I area, which is an area designated as Class I in 10 CSR 10-6.060(11)(A) Table 1. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments*[,]* and how these factors correlate with the times of visitor use of the Class I area and the frequency and timing of natural conditions that reduce visibility.

19. Aerospace manufacture and/or rework facility—Any installation that produces, reworks, or repairs in any amount any commercial, civil, or military aerospace vehicle or component.

20. Aerospace vehicle or component—Any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft.

21. Affected federal land manager—The federal agency or the federal official charged with direct responsibility for management of an area designated as Class I under the Clean Air Act (42 U.S.C. 7472) that is located within one hundred kilometers (100 km) of the proposed federal action.

*[8.]***22.** Affected source—A source that includes one (1) or more emission units subject to emission reduction requirements or limitations under Title IV of the Act. **For the purpose of 10 CSR 10-5.530 only, affected source is a wood furniture manufacturing facility that meets the criteria listed in subsections (1)(A) and (1)(B) of 10 CSR 10-5.530.**

*[9.]***23.** Affected states—All states contiguous to the permitting state whose air quality may be affected by the modification, renewal, or issuance of, or is within fifty (50) miles of, a source subject to permitting under Title V of the Act.

*[10.]***24.** Affected unit—A unit that is subject to emission reduction requirements or limitations under Title IV of the Act.

25. Affiliate—Any person, including an individual, corporation, service company, corporate subsidiary, firm, partnership, incorporated or unincorporated association, political subdivision including a public utility district, city, town, county, or a combination of political subdivisions, that directly or indirectly, through one (1) or more intermediaries, controls, is controlled by, or is under common control with the regulated electrical corporation.

*[11.]***26.** AHERA—**See** Asbestos Hazard Emergency Response Act *[of 1986 (P.L. 99–519)]*.

*[12.]***27.** Air cleaning device—Any method, process, or equipment which removes, reduces, or renders less obnoxious air contaminants discharged into the ambient air.

*[13.]***28.** Air contaminant—Any particulate matter or any gas or vapor or any combination of them.

*[14.]***29.** Air contaminant source—Any and all sources of emission of air contaminants whether privately or publicly owned or operated.

*[15.]***30.** Air-dried coating—The coatings which are dried by the use of air or forced warm air at temperatures up to ninety degrees Celsius (90 °C) (one hundred ninety-four degrees Fahrenheit (194 °F)).

31. Air pollutant—Agent, or combination of agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and by-product material) substance, or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the staff director has identified such precursor(s) for the particular purpose for which the term "air pollutant" is used.

*[16.]***32.** Air pollution—The presence in the ambient air of one (1) or more air contaminants in quantities, of characteristics, and of a duration which directly and approximately cause or contribute to injury to human, plant, or animal life or health, or to property or which unreasonably interfere with the enjoyment of life or use of property.

33. Air pollution alert—The level of an air pollution episode known as an air pollution alert is that condition when the concentration of air contaminants reach the level at which the first stage control actions are to begin.

34. Air Stagnation Advisory—A special bulletin issued by the National Weather Service entitled "Air Stagnation Advisory," which is used to warn air pollution control agencies that stagnant atmospheric conditions are expected which could cause increased concentrations of air contaminants near the ground.

35. Air-tight cleaning system—A degreasing machine that is automatically operated and seals at a differential pressure no greater than one-half (0.5) pound per square inch gauge (psig) during all cleaning and drying cycles.

36. Airless cleaning system—A degreasing machine that is automatically operated and seals at a differential pressure of twenty-five (25) torr (twenty-five millimeters of mercury (25 mmHg) (0.475 pound per square inch (psi)) or less, prior to the introduction of solvent vapor into the cleaning chamber and maintains differential pressure under vacuum during all cleaning and drying cycles.

37. Alcohol—Refers to isopropanol, isopropyl alcohol, normal propyl alcohol, or ethanol.

38. Alcohol substitutes—Nonalcohol additives that contain volatile organic compounds (VOCs) and are used in the fountain solution.

39. Allocate or allocation—The determination by the director or the administrator of the number of NO_x allowances to be initially credited to a NO_x budget unit or an allocation set-aside.

*[17.]***40.** Allowable emissions—The emission rate calculated using the maximum rated capacity of the installation (unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both) and the most stringent of the following:

A. Emission limit established in any applicable emissions control rule including those with a future compliance date; or

B. The emission rate specified as a permit condition.

*[18.]***41.** Allowance—An authorization, allocated to an affected unit by the administrator under Title IV of the Act, to emit, during or after a specified calendar year, one (1) ton of sulfur dioxide (SO_2).

42. Alternate authorized account representative—The alternate person who is authorized by the owners or operators of the unit to represent and legally bind each owner and operator in matters pertaining to the Emissions Banking and Trading Program or any other trading program in place of the authorized account representative.

*[19.]***43.** Alternate site analysis—An analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed source which demonstrates that benefits of the proposed installation significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

44. Alternative method—Any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but that has been demonstrated to the director's satisfaction to, in specific cases, produce results adequate for a determination of compliance.

*[20.]***45.** Ambient air—All space outside of buildings, stacks, or exterior ducts.

*[21.]***46.** Ambient air increments—The limited increases of pollutant concentrations in ambient air over the baseline concentration.

47. Ancillary refueling system—Any gasoline-dispensing installation, including related equipment, that shares a common storage tank with an initial fueling system. The purpose of an ancillary refueling system is to refuel in-use motor vehicles equipped with onboard refueling vapor recovery (ORVR) at automobile assembly plants.

48. Animal matter—Any product or derivative of animal life.

*[22.]***49.** Anode bake plant—A facility which produces carbon anodes for use in a primary aluminum reduction installation.

50. Antifoulant coating—A coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms and registered with the U.S. Environmental Protection Agency (EPA) as a pesticide under the federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 136).

51. Antifoulant sealer/tie coating—A coating applied over biocidal antifoulant coating for the purpose of preventing release of biocides into the environment and/or to promote adhesion between an antifoulant and a primer or other antifoulant.

52. Antique aerospace vehicle or component—An aircraft or component thereof that was built at least thirty (30) years ago. An antique aerospace vehicle would not routinely be in commercial or military service in the capacity for which it was designed.

53. Applicability analysis—The process of determining if the federal action must be supported by a conformity determination.

54. Applicable implementation plan or applicable state implementation plan (SIP)—The portion (or portions) of the SIP or most recent revision thereof, which has been approved under section 110(k) of the Act, a federal implementation plan promulgated under section 110(c) of the Act, or a plan promulgated or approved pursuant to section 301(d) of the Act (tribal implementation plan) and which implements the relevant requirements of the Act.

*[23.]***55.** Applicable requirement—All of the following listed in the Act:

A. Any standard or requirement provided for in the implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the relevant requirements, including any revisions to that plan promulgated in 40 CFR *[part]* 52;

B. Any term or condition of any preconstruction permit issued pursuant to regulations approved or promulgated through rulemaking under Title I, including part C or D of the Act;

C. Any standard or requirement under section 111 of the Act, including section 111(d);

D. Any standard or requirement under section 112 of the Act, including any requirement concerning accident prevention under section 112(r)(7);

E. Any standard or requirement of the acid rain program under Title IV of the Act or the regulations promulgated under it;

F. Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act;

G. Any standard or requirement governing solid waste incineration*[,]* under section 129 of the Act;

H. Any standard or requirement for consumer and commercial products*[,]* under section 183(e) of the Act;

I. Any standard or requirement for tank vessels under section 183(f) of the Act;

J. Any standard or requirement of the program to control air pollution from outer continental shelf sources*[,]* under section 328 of the Act;

K. Any standard or requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the administrator has determined that these requirements need not be contained in a Title V permit;

L. Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the Act, but only as it would apply to temporary sources permitted pursuant to section 504(e); and

M. Any standard or requirement established in sections 643.010–643.190, RSMo, of the Missouri Air Conservation Law and rules adopted under them.

*[24.]***56.** Approved source—A source of fuel which has been found by the department director, after the tests as s/he may require, to be in compliance with *[these]* **applicable** rules.

57. Aqueous solvent—A solvent in which water is the primary ingredient (greater than eighty percent (80%) by weight or greater than sixty percent (60%) by volume of solvent solution as applied must be water). Detergents, surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions

must have a flash point greater than ninety-three degrees Celsius (93 °C) (two hundred degrees Fahrenheit (200 °F)) (as reported by the manufacturer) and the solution must be miscible with water.

58. Architectural coating—A coating recommended for field application to stationary structures and their appurtenances, to portable buildings, to pavements, or to curbs. This definition excludes adhesives and coatings recommended by the manufacturer or importer solely for shop applications or solely for application to non-stationary structures, such as airplanes, ships, boats, and railcars.

59. Area—Any or all regions within the boundaries of the state of Missouri, as specified.

*[25.]***60.** Area of the state—Any geographical area designated by the commission.

61. Area-wide air quality modeling analysis—An assessment on a scale that includes the entire nonattainment or maintenance area using an air quality dispersion model or photochemical grid model to determine the effects of emissions on air quality; for example, an assessment using EPA's community multi-scale air quality (CMAQ) modeling system.

62. As applied—The VOC and solids content of the finishing material that is actually used for coating the substrate. It includes the contribution of materials used for in-house dilution of the finishing material.

*[26.]***63.** Asbestos—The asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite.

*[27.]***64.** Asbestos abatement—The encapsulation, enclosure, or removal of asbestos-containing materials, in or from a building, or air contaminant source; or preparation of friable asbestos-containing material prior to demolition.

*[28.]***65.** Asbestos abatement contractor—Any person who by agreement, contractual or otherwise, conducts asbestos abatement projects at a location other than his/her own place of business.

*[29.]***66.** Asbestos abatement project—An activity undertaken to encapsulate, enclose, or remove ten (10) square feet or sixteen (16) linear feet or more of friable asbestos-containing materials from buildings and other air contaminant sources*[,]* or to demolish buildings and other air contaminant sources containing ten (10) square feet or sixteen (16) linear feet or more.

*[30.]***67.** Asbestos abatement supervisor—An individual who directs, controls, or supervises others in asbestos abatement projects.

*[31.]***68.** Asbestos abatement worker—An individual who engages in asbestos abatement projects.

*[32.]***69.** Asbestos air sampling professional—An individual who by qualifications and experience is proficient in asbestos abatement air monitoring. The individual shall conduct, oversee, or be responsible for air monitoring of asbestos abatement projects before, during, and after the project has been completed.

*[33.]***70.** Asbestos air sampling technician—An individual who has been trained by an air sampling professional to do air monitoring. That individual conducts air monitoring of an asbestos abatement project before, during, and after the project has been completed.

*[34.]***71.** Asbestos-containing material (ACM)—Any material or product which contains more than one percent (1%) asbestos, by weight.

*[35.]***72.** Asbestos debris—Material that results from removal or deterioration of asbestos-containing material.

*[36.]***73.** Asbestos Hazard Emergency Response Act **(AHERA)***—[(AHERA) of]* **Law enacted in** 1986 (P.L. 99–519) **that directs EPA to develop a regulatory framework to require schools to inspect their building(s) for asbestos and take appropriate abatement actions using qualified, accredited persons for inspection and abatement**.

*[37.]***74.** Asbestos projects—An activity undertaken to remove or encapsulate one hundred sixty (160) square feet or two hundred sixty (260) linear feet or more of friable asbestos-containing materials or demolition of any structure or building or a part of it containing the previously-mentioned quantities of asbestos-containing materials.

*[38.]***75.** Asbestos removal project—An asbestos abatement project consisting of activities that involve, and are required*[,]* to take out**,** friable asbestos-containing materials from any facility. This definition includes, but is not limited to, activities associated with the cleanup of loose friable asbestos-containing debris or refuse, or both, from floors and other surfaces.

*[39.]***76.** ASME—American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017.

*[40.]***77.** Asphalt prime coat—Application of low-viscosity liquid asphalt to an absorbent surface such as a previously-untreated surface.

*[41.]***78.** Asphalt seal coat—An application of a thin asphalt surface treatment used to waterproof and improve the texture of an absorbent surface or a nonabsorbent surface such as asphalt or concrete.

*[42.]***79.** ASTM—American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

80. Authorized account representative—The person who is authorized by the owners or operators of the unit to represent and legally bind each owner and operator in matters pertaining to the Emissions Banking and Trading Program or any other budget trading program.

81. Automated data acquisition and handling system (DAHS)—That component of the Continuous Emissions Monitoring System (CEMS), or other emissions monitoring system approved for use by the department, designed to interpret and convert individual output signals from pollutant concentration monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in approved measurement units.

82. Automatic blanket wash system—Equipment used to clean lithographic blankets which can include, but is not limited to, those utilizing a cloth and expandable bladder, brush, spray, or impregnated cloth system.

*[43.]***83.** Automobile—A four (4)-wheel passenger motor vehicle or derivative capable of seating no more than twelve (12) passengers.

84. Automobile and light duty truck adhesive—An adhesive, including glass bonding adhesive, used at an automobile or light duty truck assembly coating installation, applied for the purpose of bonding two (2) motor vehicle surfaces together without regard to the substrates involved.

85. Automobile and light duty truck bedliner—A multi-component coating, used at an automobile or light duty truck assembly coating installation, applied to a cargo bed after the application of topcoat and outside of the topcoat operation to provide additional durability and chip resistance.

86. Automobile and light duty truck cavity wax—A coating, used at an automobile or light duty truck assembly coating installation, applied into the cavities of the motor vehicle primarily for the purpose of enhancing corrosion protection.

87. Automobile and light duty truck deadener—A coating, used at an automobile or light duty truck assembly coating installation, applied to selected motor vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

88. Automobile and light duty truck gasket/gasket-sealing material—A fluid, used at an automobile or light duty truck assembly coating installation, applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light duty truck gasket/gasket-sealing material includes room temperature vulcanization (RTV) seal material.

89. Automobile and light duty truck glass bonding primer—A primer, used at an automobile or light duty truck assembly coating installation, applied to windshield or other glass, or to

body openings, to prepare the glass or body opening for the application of glass bonding adhesives or the installation of adhesive bonded glass. Automobile and light duty truck glass bonding primer includes glass bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass or body openings) prior to the application of adhesive or the installation of adhesive bonded glass.

90. Automobile and light duty truck lubricating wax/compound—A protective lubricating material, used at an automobile or light duty truck assembly coating installation, applied to motor vehicle hubs and hinges.

91. Automobile and light duty truck sealer—A high viscosity material, used at an automobile or light duty truck assembly coating installation, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). Such materials are also referred to as sealant, sealant primer, or caulk.

*[44.]***92.** Automobile and light*[-]* duty truck surface coating operations—The application, flashoff, and curing of prime, primer-surfacer, topcoat, and final repair coatings during the assembly of passenger cars and light duty trucks excluding the following operations:

A. Wheel coatings;

B. Miscellaneous antirust coatings;

C. Truck interior coatings;

D. Interior coatings;

E. Flexible coatings;

F. Sealers and adhesives; and

G. Plastic parts coatings. (Customizers, body shops, and other repainters are not part of this definition.)

93. Automobile and light duty truck trunk interior coating—A coating, used at an automobile or light duty truck assembly coating installation outside of the primer-surfacer and topcoat operations, applied to the trunk interior to provide chip protection.

94. Automobile and light duty truck underbody coating—A coating, used at an automobile or light duty truck assembly coating installation, applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.

95. Automobile and light duty truck weatherstrip adhesive—An adhesive, used at an automobile or light duty truck assembly coating installation, applied to weatherstripping material for the purpose of bonding the weatherstrip material to the surface of the motor vehicle.

*[45.]***96.** Automotive underbody deadeners—Any coating applied to the underbody of a motor vehicle to reduce the noise reaching the passenger compartment.

97. Auxiliary power unit (APU)—An integrated system that—

A. Provides heat, air conditioning, engine warming, or electricity to components on a heavy duty vehicle; and

B. Is certified by the Administrator under part 89 of Title 40, *Code of Federal Regulations* (or any successor regulation), as meeting applicable emissions standards.

98. Average emission rate—The simple average of the hourly NO_x emission rate as recorded by approved monitoring systems.

(B) All terms beginning with "B."

1. Bag leak detection system—An instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light-scattering, light-transmittance, or other effects to monitor relative particulate matter loadings.

2. Baked coating—A coating that is cured at a temperature at or above one hundred ninety-four degrees Fahrenheit (194 °F).

*[1.]***3.** Base year—The year chosen in the state implementation plan to directly correlate emissions of the nonattainment pollutant in the nonattainment area with ambient air quality data pertaining to the pollutant. From the base year, projections are made to determine when the area will attain and maintain the ambient air quality standards.

4. Basecoat—A coat of colored material, usually opaque, that is applied after primer but before graining inks, glazing coats, or other opaque finishing materials and is usually topcoated for protection.

*[2.]***5.** Baseline area—The continuous area in which the source constructs as well as those portions of the intrastate area which are not part of a nonattainment area and which would receive an air quality impact equal to or greater than one microgram per cubic meter (1 $\mu g/m^3$) annual average (established by modeling) for each pollutant for which an installation receives a permit under 10 CSR 10-6.060(8) and for which increments have been established in 10 CSR 10-6.060(11)(A), Table 1. Each of these areas are references to the standard United States Geological Survey (USGS) County-Township-Range-Section system. The smallest unit of area for which a baseline date will be set is one (1) section (one (1) square mile).

*[3.]***6.** Baseline concentration—That ambient concentration level which exists at locations of anticipated maximum air quality impact or increment consumption within a baseline area at the time of the applicable baseline date, minus any contribution from installations, modifications, and major modifications subject to 10 CSR 10-6.060(8) or subject to 40 CFR 52.21 on which construction commenced on or after January 6, 1975, for sulfur dioxide and particulate matter, and February 8, 1988, for nitrogen dioxide. The baseline concentration shall include contributions from:

A. The actual emissions of other installations in existence on the applicable baseline date; and

B. The potential emissions of installations and major modifications which commenced construction before January 6, 1975, but were not in operation by the applicable baseline date.

*[4.]***7.** Baseline date—The date, for each baseline area, of the first complete application after August 7, 1977, for sulfur dioxide and particulate matter, and February 8, 1988, for nitrogen dioxide for a permit to construct and operate an installation subject to 10 CSR 10-6.060(8) or subject to 40 CFR 52.21.

8. Basic state installations—Installations which meet any of the following criteria, but are not part 70 installations:

A. Emit or have the potential to emit any air pollutant in an amount greater than the *de minimis* levels. The fugitive emissions of an installation shall not be considered unless the installation belongs to one (1) of the source categories listed in to 10 CSR 10-6.020(3)(B), Table 2; or

B. Either of the following criteria, provided the U.S. EPA administrator has deferred a decision on whether the installation would be subject to part 70:

(I) Are subject to a standard, limitation, or other requirement under section 111 of the Act, including area sources subject to a standard, limitation, or other requirement under section 111 of the Act; or

(II) Are subject to a standard or other requirement under section 112 of the Act, except that a source is not required to obtain a permit solely because it is subject to rules or requirements under section 112(r) of the Act, including area sources subject to a standard or other requirement under section 112 of the Act, except that an area source is not required to obtain a permit solely because it is subject to regulations or requirements under section 112(r) of the Act.

9. Batch—A discontinuous process involving the bulk movement of material through sequential manufacturing steps, typically characterized as non-steady-state.

10. Batch cycle—A manufacturing event of an intermediate or product from start to finish in a batch process.

11. Batch HMIWI—A hospital medical infectious waste incinerator that is designed such that neither waste charging nor ash removal can occur during combustion.

12. Batch process operation—A discontinuous operation in which a discrete quantity or batch of feed is charged into a chemical manufacturing process unit and distilled or reacted, or otherwise used at one (1) time, and may include, but is not limited to, reactors, filters, dryers, distillation columns, extractors, crystallizers, blend tanks, neutralizer tanks, digesters, surge tanks, and product separators. After each batch process operation, the equipment is generally emptied before a fresh batch is started.

13. Batch process train—The collection of equipment (e.g., reactors, filters, dryers, distillation columns, extractors, crystallizers, blend tanks, neutralizer tanks, digesters, surge tanks, and product separators) configured to produce a product or intermediate by a batch process operation. A batch process train terminates at the point of storage of the product or intermediate being produced in the batch process train. Irrespective of the product being produced, a batch process train which is independent of other processes shall be considered a single batch process train for purposes of rule 10 CSR 10-5.540.

14. Batch-type charcoal kiln—Charcoal kilns that manufacture charcoal with a batch process rather than a continuous process. The batch-type charcoal kiln process typically includes loading wood, sealing the kiln, igniting the wood, and controlled burning of the wood to produce charcoal which is unloaded.

*[5.]***15.** Best available control technology (BACT)—An emission limitation (including a visible emission limit) based on the maximum degree of reduction for each pollutant which would be emitted from any proposed installation or major modification which the director on a case-by-case basis, taking into account energy, environmental and economic impacts**,** and other costs, determines is achievable for the installation or major modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of the pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable emissions control regulation, including New Source Performance Standards established in 10 CSR 10-6.070 and 40 CFR *[part]* 60 and National Emissions Standards for Hazardous Pollutants established in 10 CSR 10-6.080 and 40 CFR *[part]* 61. If the director determines that technological or economic limitations on the application of measurement methodology to a particular source operation would make the imposition of an emission limitation infeasible, a design, equipment, work practice, operational standard, or combination of these may be prescribed instead to require the application of BACT. This standard, to the degree possible, shall set forth the emission reduction achievable by implementation of the design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results.

16. Beverage alcohol—Consumable products and their process intermediates and by-products, consisting of ethanol or mixtures of ethanol and non-volatile organic liquids.

17. Biologicals—Preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

18. Black start unit—Any electric generating unit operated only in the event of a complete loss of power.

19. Blood products—Any product derived from human blood, including but not limited to blood plasma, platelets, red or white blood corpuscles, and other derived licensed products, such as interferon, etc.

20. Body fluids—Liquid emanating or derived from humans and limited to blood; dialysate, amniotic, cerebrospinal, synovial, pleural, peritoneal, and pericardial fluids; and semen and vaginal secretions.

21. Boiler—An enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

*[6.]***22.** Building—Any structure excluding single-family, owner-occupied dwellings, and vacant public- or privately-owned residential structures of four (4) dwelling units or less being demolished for the sole purpose of public health, safety, or welfare. Excluded structures must be geographically dispersed, demolished pursuant to a public safety determination, and *[must pose]* **posing** a threat to public safety.

23. Bulk plant—Any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and subsequently loads the gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities, and has a gasoline throughput of less than twenty thousand (20,000) gallons per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under federal, state, or local law.

24. Bulk terminal—Any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or delivery tank and has a gasoline throughput of twenty thousand (20,000) gallons per day or greater. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under federal, state, or local law.

25. Burn cycle—The burn cycle for a charcoal kiln begins at the time that a batch of wood is initially lit and ends when the burn for that batch is completed and the kiln is sealed. The burn cycle does not include cool-down time.

26. Business day—All days, excluding Saturdays, Sundays, and state holidays, that a facility is open to the public.

27. Business machine—A device that uses electronic or mechanical methods to process information, perform calculations, print or copy information, or convert sound into electrical impulses for transmission, including devices listed in standard industrial classification numbers 3572, 3573, 3574, 3579, and 3661 and photocopy machines, a subcategory of standard industrial classification number 3861.

28. By compound—By individual stream components, not carbon equivalents.

29. Bypass stack—A device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

(C) All terms beginning with "C."

1. CAA—The Clean Air Act, as amended; see also "Act."

2. Camouflage coating—A coating, used principally by the military, to conceal equipment from detection.

3. Capacity factor—Ratio (expressed as a percentage) of a power generating unit's actual annual electric output (expressed in MWe-hr) divided by the unit's nameplate capacity multiplied by eight thousand seven hundred sixty (8,760) hours.

4. Capture device—A hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.

5. Capture efficiency—The fraction of all organic vapors generated by a process that is directed to a control device.

6. CARB—California Air Resources Board, 2020 L Street, PO Box 2815, Sacramento, CA 95812.

*[1.]***7.** Carbon adsorption system—A device containing adsorbent material (for example, activated carbon, aluminum, silica gel); an inlet and outlet for exhaust gases; and a system to regenerate the saturated adsorbent. The carbon adsorption system must provide for the proper disposal or reuse of all volatile organic compounds (VOC) adsorbed.

8. Cargo tank—A delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately-previous load.

*[2.]***9.** Catalytic incinerator—A control device using a catalyst to allow combustion to occur at a lower temperature.

*[3.]***10.** Category I nonfriable ACM—Asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR *[part]* 763, subpart E, Appendix E, section 1, Polarized Light Microscopy.

*[4.]***11.** Category II nonfriable ACM—Any material, excluding category I nonfriable ACM, containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR *[part]* 763, subpart E, Appendix E, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

12. Cause or contribute to a new violation—A federal action that—

A. Causes a new violation of a national ambient air quality standard (NAAQS) at a location in a nonattainment or maintenance area which would otherwise not be in violation of the standard during the future period in question if the federal action were not taken; or

B. Contributes, in conjunction with other reasonably foreseeable actions, to a new violation of a NAAQS at a location in a nonattainment or maintenance area in a manner that would increase the frequency or severity of the new violation.

13. Caused by, as used in the terms "direct emissions" and "indirect emissions"—Emissions that would not otherwise occur in the absence of the federal action.

14. Ceramic tile installation adhesive—An adhesive intended by the manufacturer for use in the installation of ceramic tiles.

15. Certified product data sheet—Documentation furnished by a coating supplier or an outside laboratory that provides the VOC content by percent weight, the solids content by percent weight, and density of a finishing material, strippable booth coating, or solvent, measured using the EPA Method 24, or an equivalent or alternative method (or formulation data, if approved by the director). The purpose of the certified product data sheet is to assist the affected source in demonstrating compliance with the emission limitations. Therefore, the VOC content should represent the maximum VOC emission potential of the finishing material, strippable booth coating, or solvent.

16. Charcoal kiln—Any closed structure used to produce charcoal by controlled burning (pyrolysis) of wood. Retorts and furnaces used for charcoal production are not charcoal kilns.

17. Charcoal kiln control system—A combination of an emission control device and connected charcoal kiln(s).

18. Chemical milling maskant—A coating that is applied directly to aluminum components to protect surface areas when chemical milling the component with a Type I or Type II etchant. Type I chemical milling maskants are used with a Type I etchant, and Type II chemical milling maskants are used with a Type II etchant. This definition does not include bonding maskants, critical use and line sealer maskants, and seal coat maskants. Maskants that must be used with a combination of Type I or Type II etchants and any of the above types of maskants are also not included in this definition.

19. Chemotherapeutic waste—Waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

*[5.]***20.** Circumvention—Building, erecting, installing, or using any article, machine, equipment, process, or method which, when used, would conceal an emission that would otherwise constitute a violation of an applicable standard or requirement. That concealment includes, but is not limited to, the use of gaseous adjutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specific size.

21. Class I hardboard—A hardboard panel that meets the specifications of Voluntary Product Standard PS 59-73 as approved by the American National Standards Institute.

22. Class II finish—A finish applied to hardboard panels that meets the specifications of Voluntary Product Standard PS 59-73 as approved by the American National Standards Institute.

*[6.]***23.** Clean room—An uncontaminated area or room which is a part of the worker decontamination enclosure system.

24. Clean scanning—The illegal act of connecting the On-Board Diagnostics (OBD) cable or wireless transmitter to the data link connector of a vehicle other than the vehicle photographed and identified on the emissions VIR for the purpose of bypassing the required OBD test procedure.

25. Cleaning operations—processes of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance or servicing, including, but not limited to, spray gun cleaning, spray booth cleaning, large and small manufactured component cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units.

26. Cleaning solution—A liquid solvent used to remove printing ink and debris from the surfaces of the printing press and its parts. Cleaning solutions include, but are not limited to, blanket wash, roller wash, metering roller cleaner, plate cleaner, impression cylinder washes, and rubber rejuvenators.

*[7.]***27.** Clear coat—A coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color. This term also includes corrosion preventative coatings used for the interior of drums or pails.

28. Clear wood finishes—Clear and semi-transparent topcoats applied to wood substrates to provide a transparent or translucent film.

29. Clinker—The product of a Portland cement kiln from which finished cement is manufactured by milling and grinding.

*[8.]***30.** Closed container—A container with a cover fastened in place so that it will not allow leakage or spilling of the contents.

31. Closed landfill—A landfill in which solid waste is no longer being placed and in which no additional wastes will be placed without first filing a notification of modification as prescribed under 40 CFR 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed.

32. Closure—That point in time when a landfill becomes a closed landfill.

33. Coating—A protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings. For the purposes of 10 CSR 10-5.330, coating does not include ink used in printing operations regulated under 10 CSR 10-5.340 and 10 CSR 10-5.442.

*[9.]***34.** Coating applicator—An apparatus used to apply a surface coating.

*[10.]***35.** Coating line—One (1) or more apparatus or operations which include a coating applicator, flash-off area, and oven where a surface coating is applied, dried, or cured, or a combination of these.

36. Coating solids (or "solids")—The part of the coating that remains after the coating is dried or cured; solids content is determined using data from EPA Method 24, or an alternative or equivalent method.

37. Co-fired combustor—A unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, ten percent (10%) or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar-quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other wastes" when calculating the percentage of hospital waste and medical/infectious waste combusted.

38. Cogenerator—For the purposes of paragraph (1)(A)3. of 10 CSR 10-6.364 only, cogenerator is a facility which—

A. For a unit that commenced construction on or prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third (1/3) its potential electrical output capacity or equal to or less than two hundred nineteen thousand (219,000) MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). If the purpose of construction is not known, the administrator will presume that actual operation from 1985 through 1987 is consistent with such purpose. However, if in any three (3)-calendar-year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third (1/3) of its potential electrical output capacity and more than two hundred nineteen thousand (219,000) MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the acid rain program; or

B. For units which commenced construction after November 15, 1990, supplies equal to or less than one-third (1/3) its potential electrical output capacity or equal to or less than two hundred nineteen thousand (219,000) MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). However, if in any three (3)-calendar-year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third (1/3) of its potential electrical output capacity and more than two hundred nineteen thousand (219,000) MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the acid rain program.

*[11.]***39.** Cold cleaner—Any device or piece of equipment that contains and/or uses liquid solvent, into which parts are placed to remove soils from the surfaces of the parts or to dry the parts. Cleaning machines that contain and use heated nonboiling solvent to clean the parts are classified as cold cleaning machines.

40. Cold rolling mill—Batch process aluminum sheet rolling mill with a preset gap between the work rolls used to reduce the sheet thickness. The process generally occurs at temperatures below two hundred sixty-five degrees Fahrenheit (265 °F). A cold rolling mill is used mainly for the production of aluminum sheet at gauges between three-tenths of one inch to two-thousandths of one inch (0.3"–0.002"). Reductions to finish gauge may occur in one (1) pass or several passes.

41. Combined cycle system—A system comprised of one (1) or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

42. Combustion turbine—An enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

*[12.]***43.** Commenced—An owner or operator has undertaken a continuous program of construction or modification *[or that an owner or operator]*, has entered into a binding agreement, or **has** contractual obligation to undertake and complete within a reasonable time*[,]* a continuous program of construction or modification.

44. Commenced commercial operation—With regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. For the purpose of 10 CSR 10-6.360 only, the date of commencement of commercial operation shall be as follows:

A. Except as provided in subsection (1)(E) of 10 CSR 10-6.360, for a unit that is a NO_x budget unit under section (1) of 10 CSR 10-6.360 on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of commercial operation even if the unit is subsequently modified, reconstructed, or repowered; and

B. Except as provided in subsections (1)(E) or (3)(H) of 10 CSR 10-6.360, for a unit that is not a NO_x budget unit under section (1) of 10 CSR 10-6.360 on the date the unit commences commercial operation, the date the unit becomes a NO_x budget unit under section (1) of 10 CSR 10-6.360 shall be the unit's date of commencement of commercial operation.

*[13.]***45.** Commenced operation—The initial setting into operation of any air pollution control equipment or process equipment. **For the purpose of 10 CSR 10-6.360 only, commenced operation is to have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber and the date of commencement of operation shall be as follows:**

A. Except as provided in subsection (1)(E) of 10 CSR 10-6.360, for a unit that is a NO_x budget unit under section (1) of 10 CSR 10-6.360 on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered; and

B. Except as provided in subsection (1)(E) of 10 CSR 10-6.360 or subsection (3)(H) of 10 CSR 10-6.360, for a unit that is not a NO_x budget unit under section (1) of 10 CSR 10-6.360 on the date of commencement of operation, the date the unit becomes a NO_x budget unit under section (1) of 10 CSR 10-6.360 shall be the unit's date of commencement of operation.

46. Commercial HMIWI—An HMIWI which offers incineration services for hospital/medical/infectious waste generated offsite by firms unrelated to the firm that owns the HMIWI.

47. Commercial solid waste—All types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

*[14.]***48.** Commercial vehicle—*[A motor vehicle designed or regularly used for carrying freight and merchandise or more than eight (8) passengers]* **Any motor vehicle, other than a passenger vehicle, and any trailer, semitrailer, or pole trailer drawn by such motor vehicle, that is designed, used, and maintained for the transportation of persons or property for hire, compensation, profit, or in the furtherance of a commercial enterprise**.

49. Commercial/Institutional boiler—A boiler used in commercial establishments or institutional establishments such as medical centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

*[15.]***50.** Commission—The Missouri Air Conservation Commission established pursuant to section 643.040, RSMo.

51. Common stack—A single flue through which emissions from two (2) or more NO_x units are exhausted.

52. Compliance account—A NO_x allowance tracking system account, established for an affected unit, in which the NO_x allowance allocations for the unit are initially recorded and in which are held NO_x allowances available for use by the unit for a control period for the purpose of meeting the unit's NO_x emission limitation.

53. Compliance certification—A submission to the director or the administrator, that is required to report a NO_x budget source's or a NO_x budget unit's compliance or noncompliance with stated requirements and that is signed by the NO_x authorized account representative in accordance with 10 CSR 10-6.360.

54. Compliance cycle—The two (2)-year duration during which a subject vehicle in the enhanced emissions inspection program area is required to comply with sections 643.300–643.355, RSMo.

A. For private-entity vehicles, the compliance cycle begins sixty (60) days prior to the subject vehicle's registration and biennial license plate tab expiration.

B. For public-entity vehicles, the compliance cycle begins on January 1 of each even-numbered calendar year. The compliance cycle ends on December 31 of each odd-numbered calendar year.

55. Compliant coating—A finishing material or strippable booth coating that meets the emission limits as specified.

*[16.]***56.** Condensate (hydrocarbons)—A hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

*[17.]***57.** Condenser—Any heat transfer device used to liquefy vapors by removing their latent heats of vaporization including, but not limited to, shell and tube, coil, surface, or contact condensers.

58. Conference, conciliation, and persuasion—A process of verbal or written communications, including but not limited to meetings, reports, correspondence, or telephone conferences between authorized representatives of the department and the alleged violator. The process shall, at minimum, consist of one (1) offer to meet with the alleged violator tendered by the department. During any such meeting, the department and the alleged violator shall negotiate in good faith to eliminate the alleged violation and shall attempt to agree upon a plan to achieve compliance.

59. Confidential business information—Secret processes, secret methods of manufacture or production, trade secrets, and other information possessed by a business that, under existing legal concepts, the business has a right to preserve as confidential, and to limit its use by not disclosing it to others in order that the business may obtain or retain business advantages it derives from its rights in the information. For the purpose of 10 CSR 10-6.300, confidential business information (CBI) is information that has been determined by a federal agency, in accordance with its applicable regulations, to be a trade secret, or commercial or financial information obtained from a person and privileged or confidential and is exempt from required disclosure under the Freedom of Information Act (5 U.S.C. 552(b)(4)).

60. Conformity determination—The evaluation (made after an applicability analysis is completed) that a federal action conforms to the applicable implementation plan and meets the requirements of rule 10 CSR 10-6.300.

61. Conformity evaluation—The entire process from the applicability analysis through the conformity determination that is used to demonstrate that the federal action conforms to the requirements of rule 10 CSR 10-6.300.

*[18.]***62.** Conservation vent—Any valve designed and used to reduce evaporation losses of VOC by limiting the amount of air admitted to, or vapors released from, the vapor space of a closed storage vessel.

63. Consolidated Emissions Reporting Rule (CERR)—A U.S. Environmental Protection Agency (EPA) rule designed to simplify federal reporting and unify state and local agency reporting dates.

*[19.]***64.** Construction—Fabricating, erecting, reconstructing, or installing a source operation. Construction shall include installation of building supports and foundations, laying of underground pipe work, building of permanent storage structures, and other construction activities related to the source operation.

65. Contact adhesive—An adhesive that—

A. Is designed for application to both surfaces to be bonded together;

B. Is allowed to dry before the two (2) surfaces are placed in contact with each other;

C. Forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and

D. Does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.

Contact adhesive does not include rubber cements that are primarily intended for use on paper substrates. Contact adhesive also does not include vulcanizing fluids that are designed and labeled for tire repair only.

*[20.]***66.** Containment—The area where an asbestos abatement project is conducted. The area must be enclosed either by a glove bag or plastic sheeting barriers.

67. Continuing program responsibility—A federal agency has responsibility for emissions caused by actions it takes itself or actions of non-federal entities that the federal agency, in exercising its normal programs and authorities, approves, funds, licenses, or permits, provided the agency can impose conditions on any portion of the action that could affect the emissions.

68. Continuous coater—A finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor system. Finishing materials that are not transferred to the part are recycled to the finishing material reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roll coating, dip coating, and flow coating.

69. Continuous emissions monitoring system (CEMS)—Monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility. For the purposes of 10 CSR 10-6.350 and 10 CSR 10-6.360, CEMS means the equipment required to sample, analyze, measure, and provide, by readings taken at least once every fifteen (15) minutes of the measured parameters, a permanent record of nitrogen oxides emissions, expressed in tons per hour for nitrogen oxides. The following systems are component parts included, consistent with 40 CFR 75, in a continuous emissions monitoring system:

A. Flow monitor;

B. Nitrogen oxides pollutant concentration monitors;

C. Diluent gas monitor (oxygen or carbon dioxide) when such monitoring is required;

D. A continuous moisture monitor when such monitoring is required; and

E. An automated data acquisition and handling system.

70. Continuous HMIWI—An HMIWI that is designed to allow waste charging and ash removal during combustion.

71. Continuous Opacity Monitoring System (COMS)—All equipment required to continuously measure and record the opacity of emissions within a stack or duct. COMS consists of sample interface, analyzer, and data recorder components and usually includes, at a minimum, transmissometers, transmissometer control equipment, and data transmission, acquisition, and recording equipment.

72. Continuous program to implement—The federal agency has started the action identified in the plan and does not stop the actions for more than an eighteen (18)-month period, unless it can demonstrate that such a stoppage was included in the original plan.

73. Continuous recorder—A data recording device recording an instantaneous data value at least once every fifteen (15) minutes.

74. Contractor—The state contracted company who shall implement the decentralized motor vehicle emissions inspection program as specified in sections 643.300–643.355, RSMo, and the state contracted company who shall implement the acceptance test procedure.

75. Control device—Any equipment that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Includes, but is not limited to, incinerators, carbon adsorbers, and condensers.

76. Control device efficiency—The ratio of the pollution released by a control device and the pollution introduced to the control device, expressed as a fraction.

77. Control period—The period beginning May 1 of a calendar year and ending on September 30 of the same calendar year.

78. Control system—The combination of capture and control devices used to reduce emissions to the atmosphere.

79. Controlled landfill—Any landfill at which collection and control systems are required under this rule as a result of the nonmethane organic compounds emission rate. The landfill is considered controlled if a collection and control system design plan is submitted in compliance with the applicable rule.

80. Conventional air spray—A spray coating method in which the coating is atomized by mixing it with compressed air at an air pressure greater than ten (10) pounds per square inch (gauge) at the point of atomization. Airless and air-assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air. Electrostatic spray technology is also not considered conventional air spray because an electrostatic charge is employed to attract the coating to the workpiece.

*[21.]***81.** Conveyorized degreaser—A type of degreaser in which the parts are loaded continuously.

82. Cove base—A flooring trim unit, generally made of vinyl or rubber, having a concave radius on one (1) edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.

83. Cove base installation adhesive—An adhesive intended by the manufacturer to be used for the installation of cove base or wall base on a wall or vertical surface at floor level.

*[22.]***84.** Criteria pollutant **or standard**—*[Air]* **Any** pollutants for which **there is established a NAAQS at 40 CFR 50 and** air quality standards have been established in 10 CSR 10-6.010.

*[23.]***85.** Crude oil—A naturally-occurring mixture which consists of hydrocarbons and sulfur, nitrogen, or oxygen derivatives, or a combination of these, of hydrocarbons which is a liquid at standard conditions.

*[24.]***86.** Custody transfer—The transfer of produced crude oil or condensate, or both, after processing or treating, or both, in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

*[25.]***87.** Cutback asphalt—Any asphaltic cement that has been liquefied by blending with VOC liquid diluents.

88. Cyanoacrylate adhesive—An adhesive with a cyanoacrylate content of at least ninety-five percent (95%) by weight.

89. Cyclone boiler—A boiler with a horizontal, cylindrical furnace that burns crushed, rather than pulverized, coal.

90. Cyclone EGU—An electric generating unit (EGU) with a fossil-fuel-fired boiler consisting of one (1) or more horizontal cylindrical barrels that utilize tangentially applied air to produce a swirling combustion pattern of coal and air.

(D) All terms beginning with "D."

1. Data Link Connector (DLC)—The terminal required to be installed on all On-Board Diagnostics (OBD) equipped vehicles that allows communication with a vehicle's OBD system.

2. Day—A period of twenty-four (24) consecutive hours beginning at midnight local time, or beginning at a time consistent with a facility's operating schedule.

*[1.]***3.** Degreasing—A solvent metal cleaning in which nonaqueous solvents are used to clean and remove soils from metal surfaces.

*[2.]***4.** Delivery vessel—A tank truck, trailer, or railroad tank car.

*[3.]***5.** *De minimis* levels—Any emissions level less than or equal to the rates listed in Table 1, subsection (3)(A) of this rule.

*[4.]***6.** Demolition project—The wrecking, razing, burning, or removing of any load-supporting structural member or portion of a structure together with any related handling operation.

7. Department—The Missouri Department of Natural Resources, which includes the director thereof, or the person or division or program within the department delegated the authority to render the decision, order, determination, finding, or other action that is subject to review by the commission. PO Box 176, Jefferson City, MO 65102.

*[5.]***8.** Department-approved inhouse project—An asbestos abatement project in a person's own facility using their own trained facility employees; the project has received departmental approval as part of planned renovation operations.

9. Design capacity—The maximum amount of solid waste the landfill can accept, as indicated in terms of volume or mass in the most recent operating or construction permit issued by the county or state agency responsible for regulating the landfill, plus any in-place waste not accounted for in the most recent permit. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than two and one-half (2.5) million megagrams or two and one-half (2.5) million cubic meters, the calculation must include a site-specific density, which must be recalculated annually.

*[6.]***10.** Designated representative—A responsible individual authorized by the owner or operator of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with *[subpart B of]* 40 CFR *[part]* 72, **subpart B** to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the *[Acid Rain Program]* **acid rain program**. Whenever the term "responsible official" is used in 40 CFR *[part]* 70, 10 CSR 10-6.065**,** or in any other regulations implementing Title V of the Act, it shall be deemed to refer to the "designated representative" with regard to all matters under the *[Acid Rain Program]* **acid rain program**.

11. Diagnostic Trouble Code (DTC)—An alphanumeric code consisting of five (5) characters which is stored by a vehicle's On-Board Diagnostics system if a vehicle malfunctions or deteriorates in such a way as to potentially raise the vehicle's tailpipe or evaporative emissions more than one and one-half (1.5) times the federal test procedure certification limits. The code indicates the system or component that is in need of diagnosis and repair to prevent the vehicle's emissions from increasing further.

*[7.]***12.** Diammonium phosphate—A product resulting from the reaction between phosphoric acid and ammonia having the molecular formula $(NH_4)_2HPO_4$.

13. Diesel engine—A compression-ignited (CI) two (2)- or four (4)-stroke engine in which liquid fuel is injected into the combustion chamber and ignited when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

14. Digital printing—A print-on-demand method of printing in which an electronic output device transfers variable data, in the form of an image, from a computer to a variety of substrates. Digital printing methods include, but are not limited to, inkjet printing, electrophotographic printing, dye sublimation printing, thermal wax printing, and solid ink printing.

15. Dioxins/furans—The combined emission of tetra- through octa-chlorinated dibenzo-para-dioxins and dibenzofurans as measured by the U.S. Environmental Protection Agency (EPA) Reference Method 23 of 40 CFR 60, Appendix A-7.

16. Direct emissions—Those emissions of a criteria pollutant or its precursors that are caused or initiated by the federal action and originate in a nonattainment or maintenance area and occur at the same time and place as the action and are reasonably foreseeable.

*[8.]***17.** Director or department director—Director of the **Missouri** Department of Natural Resources**, or a designated representative, to carry out the duties as described in section 643.060, RSMo**.

*[9.]***18.** Dispersion technique—

A. A dispersion technique is any technique designed to affect the concentration of a pollutant in the ambient air by—

(I) Using that portion of a stack which exceeds good engineering practice stack height;

(II) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

(III) Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one (1) stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise; and

B. This definition does not include:

(I) The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the installation generating the gas stream;

(II) The merging of exhaust gas streams where—

(a) The installation owner or operator demonstrates that the installation was originally designed and constructed with the merged gas streams;

(b) After July 8, 1985, the merging is part of a change in operation at the installation that includes the installation of emissions control equipment and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of dispersion technique shall apply only to the emission limitation for the pollutant affected by a change in operation; or

(c) Before July 8, 1985, the merging was part of a change in operation at the installation that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or in the event that no emission limitation was in existence prior to the merging, the director shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Without a demonstration by the source owner or operator that merging was not significantly motivated by that intent, the director shall deny credit for the effects of merging in calculating the allowable emissions for the source;

(III) Smoke management in agricultural or silvicultural prescribed burning programs;

(IV) Episodic restrictions on residential woodburning and open burning; or

(V) Techniques under part (2)(D)10.A.(III) of this definition which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the installation do not exceed five thousand (5,000) tons per year.

19. Disposal facility—All contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

20. Disposed off-site—Sending used organic solvents or coatings outside of the facility boundaries for disposal.

21. Distillation operation—An operation separating one (1) or more feed stream(s) into two (2) or more exit stream(s), each exit stream having component concentration different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid- and vapor-phase as they approach equilibrium within the distillation unit.

22. Distillation unit—A device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, stream jet, etc.), plus any associated recovery system.

*[10.]***23.** Draft permit—The version of a permit for which the permitting authority offers public participation or affected state review.

*[11.]***24.** Drum—Any cylindrical container of thirteen to one hundred ten (13–110)-gallon capacity.

*[12.]***25.** Dry cleaning installation—An installation engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one (1) or more washes in solvent, extraction of excess solvent by spinning and drying by tumbling in an airstream. The installation includes, but is not limited to, any washer, dryer, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

26. Dry scrubber—An add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gases in the exhaust stream forming a dry powder material.

27. Dual fuel engine—Compression ignited stationary internal combustion engine that is capable of burning liquid fuel and gaseous fuel simultaneously.

(E) All terms beginning with "E."

1. Early reduction credit (ERC)—NO_x emission reductions in the years 2000, 2001, 2002, and 2003 that are below the limits specified in subsection (3)(A) of 10 CSR 10-6.350; ERCs will only be available for use during the years of 2004 and 2005. When calculating ERCs or performing calculations involving ERCs, ERCs shall always be rounded down to the nearest ton.

2. Economic benefit—Any monetary gain which accrues to a violator as a result of noncompliance.

3. E85—Ethanol-gasoline blend containing eighty-five percent (85%) denatured ethanol and fifteen percent (15%) gasoline that also meets the standard specification requirements of the most recent update to ASTM D 5798.

4. Electric dissipating coating—A coating that rapidly dissipates a high-voltage electric charge.

5. Electric generating unit (EGU)—Any fossil-fuel-fired boiler or turbine that serves an electrical generator with the potential to use more than fifty percent (50%) of the usable energy from the boiler or turbine to generate electricity.

6. Electric-insulating and thermal conducting coating—A coating that displays an electrical insulation of at least one thousand (1,000) volts DC per mil on a flat test plate and an average thermal conductivity of at least twenty-seven hundredths British thermal units (0.27 Btu) per hour-foot-degree-Fahrenheit.

7. Electric-insulating varnish—A non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.

8. Electrodeposition primer (EDP)—A protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank.

9. Electronic component—All portions of an electronic assembly, including, but not limited to, circuit board assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and associated electronic component manufacturing equipment such as screens and filters.

10. Electrostatic preparation coat—A coating that is applied to a plastic part solely to provide conductivity for the subsequent application of a prime, topcoat, or other coating through the use of electrostatic application methods. An electrostatic preparation coat is clearly identified as an electrostatic preparation coat on its material safety data sheet.

11. Emergency—A situation where extremely quick action on the part of the federal agencies involved is needed and where the timing of such federal activities makes it impractical to meet the requirements of 10 CSR 10-6.300, such as natural disasters like hurricanes or earthquakes, civil disturbances such as terrorist acts, and military mobilizations.

*[1.]***12.** Emergency asbestos abatement project—An asbestos abatement project that must be undertaken immediately to prevent imminent severe human exposure or to restore essential facility operation.

13. EMI/RFI shielding—A coating used on electrical or electronic equipment to provide shielding against electromagnetic interference (EMI), radio frequency interference (RFI), or static discharge.

*[2.]***14.** Emission—The release or discharge, whether directly or indirectly, into the atmosphere of one (1) or more air contaminants.

15. Emission data—

A. The identity, amount, frequency, concentration, or other characteristics (related to air quality) of any air contaminant which—

(I) Has been emitted from an emission unit;

(II) Results from any emission by the emissions unit;

(III) Under an applicable standard or limitation, the emissions unit was authorized to emit; or

(IV) Is a combination of any of the parts (2)(E)15.A.(I), (II), or (III) of this rule;

B. The name, address (or description of the location), and the nature of the emissions unit necessary to identify the emission units including, a description of the device, equipment, or operation constituting the emissions unit; and

C. The results of any emission testing or monitoring required to be reported under any rules of the commission.

16. Emission events—Discrete venting episodes that may be associated with a single unit of operation.

17. Emission Inventory—A listing of information on the location, type of source, type and quantity of pollutant emitted, as well as other parameters of the emissions;

*[3.]***18.** Emission limitation—A regulatory requirement, permit condition, or consent agreement which limits the quantity, rate, or concentration of emissions on a continuous basis, including any requirement which limits the level of opacity, prescribes equipment, sets fuel specifications, or prescribes operation or maintenance procedures for an installation to assure continuous emission reduction.

19. Emission offsets—Emissions reductions which are quantifiable, consistent with the applicable implementation plan attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable implementation plan provisions, enforceable under both state and federal law, and permanent within the time frame specified by the program. Emissions reductions intended to be achieved as emissions offsets must be monitored and enforced in a manner equivalent to that under EPA's new source review requirements.

20. Emission rate cutoff—The threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the applicable regulation is required.

21. Emission reduction credit (ERC)—A certified emission reduction that is created by eliminating future emissions and expressed in tons per year. One (1) ERC is equal to one (1) ton per year. An ERC must be real, properly quantified, permanent, and surplus.

22. Emissions—Air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the administrator by the NO_x authorized account representative and as determined by the administrator.

23. Emissions budgets—Those portions of the total allowable emissions defined in an EPA-approved revision to the applicable implementation plan for a certain date for the purpose of meeting reasonable further progress milestones or attainment or maintenance demonstrations, for any criteria pollutant or its precursors, specifically allocated by the applicable implementation plan to mobile sources, to any stationary source or class of stationary sources, to any federal action or class of action, to any class of area sources, or to any subcategory of the emissions inventory. The allocation system must be specific enough to assure meeting the criteria of section 176(c)(1)(B) of the CAA. An emissions budget may be expressed in terms of an annual period, a daily period, or other period established in the applicable implementation plan.

24. Emissions inspection—Tests performed on a vehicle in order to evaluate whether the vehicle's emissions control components are present and properly functioning.

*[4.]***25.** Emissions unit—Any part or activity of an installation that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act. This term is not meant to alter or affect the definition of the term unit for the purposes of Title IV of the Act. **For the purpose of 10 CSR 10-6.410 only, emissions unit is any part of a source or activity at a source that emits or would have the potential to emit criteria pollutants or their precursors.**

*[5.]***26.** Emulsified asphalt—An emulsion of asphalt cement and water that contains a small amount of an emulsifying agent, as specified in ASTM D (977-77) or ASTM D (2397-73).

*[6.]***27.** Enamel—A surface coating that is a mixture of paint and varnish, having vehicles similar to those used for varnish, but also containing pigments.

28. Enclosed combustor—An enclosed firebox which maintains a relatively-constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

29. End exterior coating—A coating applied to the exterior end of a can to provide protection to the metal.

*[7.]***30.** End seal compound—The gasket forming coating used to attach the end pieces of a can during manufacturing or after filling with contents.

31. Energized electrical system—Any alternating current (AC) or direct current (DC) electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells, and tail sections.

32. Energy Information Administration—The Energy Information Administration of the United States Department of Energy.

33. Engine rating—The output of an engine as determined by the engine manufacturer and listed on the nameplate of the unit, regardless of any derating.

*[8.]***34.** Equipment—Any item that is designed or intended to perform any operation and includes any item attached to it to assist in the operation.

35. EPA—The U.S. Environmental Protection Agency.

36. EDPM roof membrane—A prefabricated single sheet of elastomeric material composed of ethylene propylene diene monomer (EPDM) and that is field-applied to a building roof using one (1) layer or membrane material.

37. Equipment leak—Emissions of volatile organic compounds from pumps, valves, flanges, or other equipment used to transfer or apply finishing materials or organic solvents.

38. Equivalent method—Any method of sampling and analyzing for an air pollutant that has been demonstrated to the director's satisfaction to have a consistent and quantitatively-known relationship to the reference method under specific conditions.

39. Etching filler—A coating for metal that contains less than twenty-three percent (23%) solids by weight and at least one-half percent (0.5%) acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

*[9.]***40.** Excess emissions—The emissions which exceed the requirements of any applicable emission control regulation.

*[10.]***41.** Excessive concentration—

A. For installations seeking credit for reduced ambient pollutant concentrations from stack height exceeding that defined in subparagraph *[(2)(G)3.B.]***(2)(G)15.B. of this rule** an excessive concentration is a maximum ground level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which are at least forty percent (40%) in excess of the maximum

concentration experienced in the absence of the downwash, wakes, or eddy effects, and that contributes to a total concentration due to emissions from all installations that is greater than an ambient air quality standard. For installations subject to the prevention of significant deterioration program as set forth in 10 CSR 10-6.060(8), an excessive concentration means a maximum ground level concentration due to emissions from a stack due to the same conditions as mentioned previously and is greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this definition shall be prescribed by the new source performance regulation as referenced by 10 CSR 10-6.070 for the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where demonstrations are approved by the director, an alternative emission rate shall be established in consultation with the source owner or operator;

B. For installations seeking credit after October 11, 1983, for increases in stack heights up to the heights established under subparagraph *[(2)(G)3.B.]* **(2)(G)15.B. of this rule**, an excessive concentration is either—

(I) A maximum ground level concentration due in whole or part to downwash, wakes, or eddy effects as provided in subparagraph *[(2)(E)10.A.]* **(2)(E)41.A.** of this rule, except that the emission rate used shall be the applicable emission limitation (or, in the absence of this limit, the actual emission rate); or

(II) The actual presence of a local nuisance caused by the stack, as determined by the director; and

C. For installations seeking credit after January 12, 1979, for a stack height determined under subparagraph *[(2)(G)3.B.]* **(2)(G)15.B. of this rule** where the director requires the use of a field study of fluid model to verify good engineering practice stack height, for installations seeking stack height credit after November 9, 1984, based on the aerodynamic influence of cooling towers and for installations seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not represented adequately by the equations in subparagraph *[(2)(G)3.B.]* **(2)(G)15.B. of this rule**, a maximum ground level concentration due in whole or part to downwash, wakes, or eddy effects that is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of downwash, wakes**,** or eddy effects.

*[11.]***42.** Existing—As applied to any equipment, machine, device, article, contrivance, or installation shall mean in being, installed, or under construction in the Kansas City metropolitan area on September 25, 1968 (Buchanan County, January 21, 1970), in the St. Louis metropolitan area on March 24, 1967 (Franklin County, January 18, 1972), in the Springfield metropolitan area on September 24, 1971, and in the outstate Missouri area on February 24, 1971, except that if equipment, machine, device, article, contrivance, or installation subsequently is altered, repaired, or rebuilt at a cost of fifty percent (50%) or more of its replacement cost exclusive of routine maintenance, it shall no longer be existing*[,]* but shall be considered new as defined in this regulation. The cost of installing equipment designed principally for the purpose of air pollution control is not to be considered a cost of altering, repairing, or rebuilding existing equipment for the purpose of this definition. **For the purpose of 10 CSR 10-2.040 and 10 CSR 10-5.030 only, existing is any source which was in being, installed, or under construction on February 15, 1979, except that if any source subsequently is altered, repaired, or rebuilt at a cost of thirty percent (30%) or more of its replacement cost, exclusive of routine maintenance, it shall no longer be existing but shall be considered as new.**

*[12.]***43.** Exterior coating (two (2)-piece)—A surface coating used to coat the outside face of a two (2)-piece can. Used to provide protection from the lithograph or printing operations.

*[13.]***44.** External floating roof—A storage vessel cover in an open top tank consisting of a double-deck or pontoon single deck which rests upon and is supported by petroleum liquid being contained and is equipped with a closure seal(s) to close the space between the roof edge and tank wall.

*[14.]***45.** Extreme environmental conditions—The exposure to any of*[—]* the weather all of the time, temperatures consistently above ninety-five degrees Celsius (95 °C), detergents-abrasive and scouring agents, solvents, corrosive atmospheres**,** or similar environmental conditions.

46. Extreme high gloss coating—A coating applied to—

A. Pleasure craft which, when tested by the ASTM Test Method D-523-89, shows a reflectance of ninety percent (90%) or more on a sixty-degree (60°) meter; or

B. Metal and plastic parts that are not components of pleasure craft, which, when tested by the ASTM Test Method D-523 adopted in 1980, shows a reflectance of seventy-five percent (75%) or more on a sixty-degree (60°) meter.

47. Extreme performance coating—A coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to the following:

A. Chronic exposure to corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;

B. Repeated exposure to temperatures in excess of two hundred fifty degrees Fahrenheit (250 °F); or

C. Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents.

(F) All terms beginning with "F."

1. Fabric coating—A coating applied to a textile substrate by dipping or by means of a knife or roll.

2. Fabric filter or baghouse—An add-on air pollution control system that removes particulate matter and nonvaporous metals emissions by passing flue gas through filter bags.

3. Facilities manager—The individual in charge of purchasing, maintaining, and operating the HMIWI or the owner's or operator's representative responsible for the management of the HMIWI. Alternative titles may include director of facilities or vice president of support services.

4. Federal action—Any activity engaged in by a department, agency, or instrumentality of the federal government, or any activity that a department, agency, or instrumentality of the federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.). Where the federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the federal permit, license, or approval.

5. Federal agency—A federal department, agency, or instrumentality of the federal government.

*[1.]***6.** Federally enforceable—All limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR *[parts]* 55, 60, 61**,** and 63; requirements within any applicable state implementation plan; requirements in operating permits issued pursuant to 40 CFR *[parts]* 70 or 71, unless specifically designated as non-federally enforceable; and any permit requirements established pursuant to 40 CFR *[sections]* 52.10, 52.21, or *[part]* 55, or under regulations approved pursuant to 40 CFR *[part]* 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the state implementation plan and expressly requires adherence to any permit issued under such program.

7. Fill capacity—The maximum amount of wood that can be properly loaded into a charcoal kiln prior to the burn cycle.

*[2.]***8.** Final permit—The version of a part 70 permit issued by the permitting authority that has completed all review procedures as required in *[part 70 sections]* **40 CFR** 70.7 and 70.8.

*[3.]***9.** Final repair—The final coatings applied to correct topcoat imperfections after the complete assembly of the automobile.

10. Finish foil mill—Batch process aluminum foil rolling mill with work rolls in contact to reduce foil gauge. This process reduces intermediate foil and in some cases finished sheet to final gauges. A finish foil mill is used mainly in the production of aluminum foil at gauges between 0.005 inches to 0.00018 inches. Reductions to finish gauge may occur in several passes through the mill.

11. Finish primer/surfacer—A coating applied to pleasure craft with a wet film thickness of less then ten (10) mils prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections.

12. Finishing application station—The part of a finishing operation where the finishing material is applied, e.g., a spray booth.

13. Finishing material—A coating used in the wood furniture industry. For the purpose of 10 CSR 10-5.530, such materials include, but are not limited to, basecoats, stains, washcoats, sealers, and topcoats.

14. Finishing operation—Those activities in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

*[4.]***15.** Firebox—The chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator.

16. Flame zone—The portion of the combustion chamber in a boiler occupied by the flame envelope.

17. Flare—An open combustor without enclosure or shroud.

*[5.]***18.** Flash off area—The space between the application area and the oven.

19. Flexible coating—A coating that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original equipment manufacturer.

20. Flexible package printing—The application of a coating, or the performance of a graphic arts operation, to flexible packaging. The printing processes used for flexible package printing are rotogravure and flexography. The printing of shrink-wrap labels or wrappers conducted on or in-line with a flexible package printing press is flexible package printing. The printing of self-adhesive labels is not flexible package printing.

21. Flexible packaging—Any package or part of a package the shape of which can be readily changed. Flexible packaging includes, but is not limited to, bags, pouches, liners, and wraps utilizing paper, plastic, film, aluminum foil, metallized or coated paper or film, or any combination of these materials.

22. Flexible vinyl—Non-rigid polyvinyl chloride plastic with at least five percent (5%) by weight plasticizer content.

*[6.]***23.** Flexographic printing—The application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

24. Flow indicator—A device that indicates whether gas flow is present in a vent stream.

25. Flush cleaning—The removal of contaminants such as dirt, grease, and coatings from a vehicle, component, or coating equipment by passing solvent over, into, or through the item being cleaned. The solvent may simply be poured into the item cleaned and then drained, or be assisted by air or hydraulic pressure, or by pumping. The solvent drained from the item may be assisted by air, compressed gas, hydraulic pressure, or pumping. Hand-wipe cleaning operations where wiping, scrubbing, mopping, or other hand actions are used are not included in this definition. Flush cleaning does not include spray gun cleaning.

26. Fog coat—A coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture.

27. Food service establishment—Any fixed or mobile restaurant; coffee shop; cafeteria; short order cafe; luncheonette; grill; tearoom; sandwich shop; soda fountain; tavern; bar; cocktail lounge; night club; roadside stand; industrial feeding establishment; private, public, or nonprofit organization or institution routinely serving food; catering kitchen, commissary, or similar place in which food or drink is placed for sale or for service on the premises or elsewhere; and any other eating or drinking establishment or operation where food is served or provided for the public with or without charge.

28. Fossil-fuel—Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

29. Fossil-fuel-fired—With regard to a unit, the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel is projected to comprise more than fifty percent (50%) of the annual heat input. For the purpose of 10 CSR 10-6.360 only, fossil-fuel-fired, with regard to a unit, is the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel—

A. Actually combusted comprises more than fifty percent (50%) of the annual heat input on a Btu basis during any year starting in 1995 or, if a unit had no heat input starting in 1995, during the last year of operation of the unit prior to 1995; or

B. Is projected to comprise more than fifty percent (50%) of the annual heat input on a Btu basis during any year; provided that the unit shall be "fossil-fuel-fired" as of the date, during such year, on which the unit begins combusting fossil fuel.

30. Fountain solution—The solution which is applied to the image plate to maintain the hydrophilic properties of the nonimage areas. It is primarily water containing an etchant, a gum arabic, and a dampening aid (commonly containing alcohol and alcohol substitues).

31. Freeboard area—The air space in a batch-load cold cleaner that extends from the liquid surface to the top of the tank.

*[7.]***32.** Freeboard height—*[The distance from the solvent (cold cleaner) or solvent vapor level (vapor degreaser) to the top edge of the solvent container.]*

A. The distance from the top of the solvent to the top of the tank for batch-loaded cold cleaners;

B. The distance from the air-vapor interface to the top of the tank for open-top vapor degreasers; or

C. The distance from either the air-solvent or air-vapor interface to the top of the tank for conveyorized degreasers.

*[8.]***33.** Freeboard ratio—The freeboard height divided by the **smaller of either the inside length or inside** width of the degreaser.

*[9.]***34.** Friable asbestos-containing material—Any material that contains more than one percent (1%) asbestos, by weight, which is applied to ceilings, walls, structural members, piping, ductwork, or any other part of a building or facility and which, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

*[10.]***35.** Fugitive emissions—Those emissions which according to good engineering practice could not pass through a stack, chimney, vent, or other functionally-equivalent opening.

(G) All terms beginning with "G."

1. Gas mover equipment—The equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

2. Gas volatile organic compounds (VOC) service—A component that contacts a process fluid containing ten percent (10%) or greater VOC by weight that is in a gaseous state at operating conditions.

*[1.]***3.** Gasoline—A petroleum liquid having a Reid vapor pressure four pounds (4 lbs*[.]*) per square inch or greater.

4. Gasoline dispensing facility—Any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle.

5. Gasoline distribution facility—Any stationary facility which transfers, loads, and/or unloads gasoline, including but not limited to gasoline bulk terminals, bulk plants, and pipeline facilities, that also does not meet the definition of a gasoline dispensing facility.

6. Gaseous fuel—A combustible gas that includes, but is not limited to, natural gas, landfill gas, coal-derived gas, refinery gas, and biogas. Blast furnace gas is not considered a gaseous fuel under this definition.

7. General account—A NO_x allowance tracking system account that is not a compliance account or an overdraft account.

8. General aviation—Segment of civil aviation that encompasses all facets of aviation except air carriers, commuters, and military. General aviation includes charter and corporate-executive transportation, instruction, rental, aerial application, aerial observation, business, pleasure, and other special uses.

9. General aviation rework facility—Any aerospace installation with the majority of its revenues resulting from the reconstruction, repair, maintenance, repainting, conversion, or alteration of general aviation aerospace vehicles or components.

10. Generating activity—Any process modification that results in a permanent reduction in emissions.

11. Generator—A device that produces electricity.

12. Generator source—Any source that generates an ERC.

13. Gloss reducer—A coating that is applied to a plastic part solely to reduce the shine of the part.

*[2.]***14.** Glove bag—A manufactured or fabricated device, typically constructed of six (6) mil transparent polyethylene or polyvinyl chloride plastic. This device consists of two (2) inward projecting long sleeves, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The bags are especially designed to contain sections of pipe for the purpose of removing a short length of damaged asbestos material without releasing fibers into the air.

*[3.]***15.** Good engineering practice (GEP) stack height—GEP stack height means the greater of—

A. Sixty-five meters (65 m), measured from the ground level elevation at the base of the stack;

B. For stacks on which construction commenced on or before January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals required under 40 CFR *[parts]* 51 and 52,

$$Hg = 2.5H$$

provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation; and for all other stacks,

$$Hg = H + 1.5L$$

Where:
Hg = GEP stack height, measured from the ground level elevation at the base of the stack;
H = height of nearby structure(s) measured from the ground level elevation at the base of the stack; and
L = lesser dimension, height, or projected width of the nearby structure(s). Provided that the director may require the use of a field study or fluid model to verify GEP stack height for the installation; or

C. The height demonstrated by a fluid model or field study approved by the director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures, or nearby terrain features.

16. Gravity-based assessment—The degree of seriousness of a violation taking into consideration the risk to human health and the environment posed by the violation and considering the extent of deviation from sections 643.010–643.250, RSMo.

17. Greenfield site—A contiguous area under common control that is an undeveloped site.

18. Gross vehicle weight rating (GVWR)—The value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

19. Ground-level ozone—A colorless, odorless gas formed by the mixing of volatile organic compounds and oxides of nitrogen from stationary and mobile pollution sources in the presence of heat and sunlight. Ground-level ozone is a strong oxidizer that negatively affects human health by causing diminished lung function in both healthy individuals and those with pre-existing respiratory problems.

*[4.]***20.** Growth increment—The limit on new installation or major modification emissions of a nonattainment pollutant. Growth increment is reserved for use only by installations with no applicable, internally-generated, banked emissions reductions.

(H) All terms beginning with "H."

1. Halogenated vent stream—Any vent stream determined to have a total concentration of halogen atoms (by volume) contained in organic compounds of two hundred (200) parts per million by volume or greater determined by Method 18 of 40 CFR 60, Appendix A, or other test or data validated by Method 301 of 40 CFR 63, Appendix A, or by engineering assessment or process knowledge that no halogenated organic compounds are present. For example, one hundred fifty (150) parts per million by volume of ethylene dichloride would contain three hundred (300) parts per million by volume of total halogen atoms.

2. Hand cleaning/wiping operation—The removal of contaminants, such as dirt, grease, oil, and coatings, from a surface by physically rubbing it with a material such as a rag, paper, or cotton swab that has been moistened with a cleaning solvent.

3. Hand-fired fuel-burning equipment—Any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

4. Hardboard—A panel manufactured primarily from interfelted lignocellulosic fibers that are consolidated under heat and pressure in a hot press.

5. Hardwood particleboard—A manufactured board one-fourth inch (1/4") or less in thickness made of individual wood particles that have been coated with a binder and formed into flat sheets by pressure.

*[1.]***6.** Hazardous air pollutant—Any of the air pollutants listed in subsection (3)(C) of this rule.

[2. HHV—A higher heating value as determined by 10 CSR 10-6.040(2) (ASTM Standard: D 2015-66, Part 19, 1972, Standard Method for Determining Gross Heating Values of Solid Fuels).]

7. Hearing—Any presentation to, or consideration by the hearing officer of evidence or argument on a petition seeking the commission's review of an action by the department.

8. Hearing officer—A person appointed by the Administrative Hearing Commission.

9. Heat input—The product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) and the fuel feed rate into a combustion device (in mass of fuel/time), as measured, recorded, and reported to the administrator by the NO_x authorized account representative and as determined by the administrator in accordance with the approved process, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

10. Heat resistant coating—A coating that must withstand a temperature of at least four hundred degrees Fahrenheit (400 °F) during normal use.

11. Heatset—A class of web-offset lithographic and letterpress printing in which the setting of the printing inks requires a heated dryer to evaporate the ink oils. The setting or curing of

inks using only radiation (e.g., infrared, ultraviolet light, or electron beam) is not heatset and is classified as non-heatset.

12. Heavy duty diesel vehicle—A vehicle that—

A. Has a gross vehicle weight rating greater than ten thousand pounds (10,000 lbs);

B. Is powered by a diesel engine; and

C. Is designed primarily for transporting persons or property on a public street or highway.

13. Heavy duty vehicle (HDV)—Any motor vehicle rated at eight thousand five hundred one pounds (8,501 lbs) GVWR or more.

14. High-air phase—The stage of the batch operating cycle when the primary chamber reaches and maintains maximum operating temperatures.

15. High-bake coating—A coating which is designed to cure only at temperatures of more than one hundred ninety-four degrees Fahrenheit (194 °F).

16. High-build primer/surfacer—A coating applied to pleasure craft with a wet film thickness of ten (10) mils or more prior to the application of a topcoat for purposes of providing a moisture barrier, corrosion resistance, adhesion of subsequent coatings, or promoting a uniform surface necessary for filling in surface imperfections.

17. High-gloss coating—A coating applied to pleasure craft which, when tested by the ASTM Test Method D-523-89, shows a reflectance of eighty-five percent (85%) or more on a sixty-degree (60°) meter.

18. High-performance architectural coating—A coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05, Voluntary Specification, Performance Requirements, and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels or AAMA 2605-05, Voluntary Specification, Performance Requirements, and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.

19. High-temperature coating—A coating that is certified to withstand a temperature of one thousand degrees Fahrenheit (1,000 °F) for twenty-four (24) hours.

*[3.]***20.** High terrain—Any area having an elevation nine hundred feet (900') or more above the base of the stack of the installation.

21. High-volume low-pressure (HVLP) spray equipment—Spray equipment that is used to apply coating by means of spray gun that operates at ten pounds per square inch gauge (10.0 psig) of atomizing air pressure or less at the air cap.

22. Higher heating value (HHV)—The total heat liberated per mass of fuel burned in British thermal units (Btu) per pound, when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. It can be determined by 10 CSR 10-6.040(2) (ASTM Standard: D 2015-66, Part 19, 1972, *Standard Method for Determining Gross Heating Values of Solid Fuels*). For the purpose of 10 CSR 10-6.390 only, if certification of the HHV is not provided by the third party fuel supplier, it shall be determined by one (1) of the following test methods: ASTM D2015-85 for solid fuels; ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or ASTM D1826-88 or ASTM D1945-81 in conjunction with ASTM D3588-89 for gaseous fuels.

23. HMIWI operator—Any person who operates, controls, or supervises the day-to-day operation of an HMIWI.

24. Hospital—Any facility which has an organized medical staff, maintains at least six (6) inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of twenty-four (24) hours per admissions. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision.

25. Hospital/medical/infectious waste incinerator (HMIWI) or HMIWI unit—Any device that combusts any amount of hospital waste and/or medical/infectious waste.

26. Hospital waste—Discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

*[4.]***27.** Hot car—A vehicle which transfers hot coke from the oven to the area of quenching.

28. Household waste—Any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

(I) All terms beginning with "I."

1. Idling—The operation of an engine where the engine is not engaged in gear.

*[1.]***2.** Incinerator—Any article, machine, equipment, contrivance, structure, or part of a structure used to burn refuse or to process refuse material by burning other than by open burning as defined in this rule. **For the purpose of 10 CSR 10-5.530 only, incinerator is an enclosed combustion device that thermally oxidizes volatile organic compounds to carbon monoxide (CO) and carbon dioxide (CO_2). This term does not include devices that burn municipal or hazardous waste material. For the purpose of 10 CSR 10-5.550 only, incinerator is any enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one (1) section; rather, the energy recovery system is a separate section following the combustion section and the two (2) are joined by ducting or connections that carry fuel gas.**

3. Increase the frequency or severity of any existing violation of any standard in any area—To cause a nonattainment area to exceed a standard more often or to cause a violation at a greater concentration than previously existed or would otherwise exist during the future period in question, if the project were not implemented.

4. Indirect emissions—Those emissions of a criteria pollutant or its precursors—

A. That are caused or initiated by the federal action and originate in the same nonattainment or maintenance area but may occur at a different time or place;

B. That are reasonably foreseeable;

C. That the agency can practically control;

D. That which the agency has continuing program responsibility; and

E. That the federal agency can practically control and will maintain control due to a continuing program responsibility of the federal agency, including, but not limited to—

(I) Traffic on or to, or stimulated or accommodated by, a proposed facility which is related to increases or other changes in the scale or timing of operations of such facility;

(II) Emissions related to the activities of employees of contractors or federal employees;

(III) Emissions related to employee commutation and similar programs to increase average vehicle occupancy imposed on all employers of a certain size in the locality; or

(IV) Emissions related to the use of federal facilities under lease or temporary permit.

For the purposes of this definition, even if a federal licensing, rulemaking, or other approving action is a required initial step

for a subsequent activity that causes emissions, such initial steps do not mean that a federal agency can practically control any resulting emissions.

*[2.]***5.** Indirect heating source—A source operation in which fuel is burned for the primary purpose of producing steam, hot water**,** or hot air, or other indirect heating of liquids, gases, or solids where, in the course of doing so, the products of combustion do not come into direct contact with process materials.

6. Indoor floor covering installation adhesive—An adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl-backed carpet, resilient sheet, and roll or artificial grass. Adhesives used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl, are excluded from this category.

7. Industrial boiler—A boiler used in manufacturing, processing, mining, and refining, or any other industry to provide steam, hot water, and/or electricity.

8. Industrial solid waste—Solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, 40 CFR 264 and 265. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

9. Industrial surface coating operation—The surface coating of manufactured items intended for distribution in commerce to persons other than the person or legal entity performing the surface coating.

10. Infectious agent—Any organism (such as a virus or bacteria) that is capable of being communicated by invasion and multiplication in body tissues and capable of causing disease or adverse health impacts in humans.

11. Initial emissions inspection—An emissions inspection consisting of the inspection series that occurs the first time a vehicle is inspected in a compliance cycle.

12. Initial fueling of motor vehicles—The operation, including related equipment, of dispensing gasoline fuel into a newly-assembled motor vehicle equipped with ORVR at an automobile assembly plant while the vehicle is still being assembled on the assembly line. Newly-assembled motor vehicles being fueled on the assembly line shall be equipped with ORVR and have fuel tanks that have never before contained gasoline fuel.

13. Ink formulation as applied—The base graphic arts coating and any additives such as thinning solvents to make up the ink material that is applied to a substrate.

14. In-line repair—The operation performed and coating(s) applied to correct damage or imperfections in the topcoat on parts that are not yet on a completely-assembled vehicle. The curing of the coatings applied in these operations is accomplished at essentially the same temperature as that used for curing the previously-applied topcoat. Also referred to as high-bake repair or high-bake reprocess and is considered part of the topcoat operation.

*[3.]***15.** Innovative control technology—Any system of air pollution control that has not been adequately demonstrated in practice but would have a substantial likelihood of achieving greater continuous emission reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.

*[4.]***16.** Insignificant activity—An activity or emission unit in which the only applicable requirement would be to list the requirement in an operating permit application under 10 CSR 10-6.065 and is either of the following:

A. Emission units whose aggregate emission levels for the installation do not exceed that of the *de minimis* levels; and

B. Emission units or activities listed in 10 CSR 10-6.061 as exempt or excluded from construction permit review under 10 CSR 10-6.060.

*[5.]***17.** Inspector—An individual, under AHERA, who collects and assimilates information used to determine whether asbestos-containing material is present in a building or other air contaminant sources.

*[6.]***18.** Installation—All source operations including activities that result in fugitive emissions, that belong to the same industrial grouping (that have the same two (2)-digit code as described in the *Standard Industrial Classification Manual*, 1987), and any marine vessels while docked at the installation, located on one (1) or more contiguous or adjacent properties and under the control of the same person (or persons under common control).

19. Institutional cleaning—Cleaning activities conducted at organizations, societies, or corporations including but not limited to schools, hospitals, sanitariums, and prisons.

20. Institutional Vehicle—Any motor vehicle, other than a passenger vehicle, and any trailer, semitrailer, or pole trailer drawn by such a motor vehicle, that is designed, used, and maintained for the transportation of persons or property for an establishment, foundation, society, or the like, devoted to the promotion of a particular cause or program, especially one of a public, educational, or charitable character.

*[7.]***21.** Interior body spray (two (2)- and three (3)-piece)—The surface coating for the interior and ends of a two (2)-piece formed can or the surface coating of the side of the rectangular material to be used as the interior and ends of a three (3)-piece can.

22. Interior well—Any well or similar collection component located inside the perimeter of the landfill waste. A perimeter well located outside the landfill waste is not an interior well.

23. Intermediate foil mill—Batch process aluminum foil rolling mill with the work rolls in contact to reduce foil gauge. This process reduces finished sheet to intermediate foil gauges. An intermediate foil mill is used mainly in the production of aluminum foil at gauges between 0.010 inches to 0.0004 inches. Reductions to finish gauge may occur in several passes through the mill.

24. Intermediate installations—Part 70 installations that become basic state installations based on their potential to emit by accepting the imposition of voluntarily-agreed-to federally-enforceable limitations on the type of materials combusted or processed, operating rates, hours of operation, or emission rates more stringent than those otherwise required by rule or regulation.

25. Intermittent HMIWI—An HMIWI that is designed to allow waste charging, but not ash removal, during combustion.

26. Internal combustion engine—Any engine in which power, produced by heat and/or pressure developed in the engine cylinder(s) by burning a mixture of fuel and air, is subsequently converted to mechanical work by means of one (1) or more pistons.

*[8.]***27.** Internal floating roof—A product cover in a fixed roof tank which rests upon or is floated upon the VOC liquid being contained and which is equipped with a sliding seal(s) to close the space between the edge of the covers and tank shell.

*[9.]***28.** Inventory—A quantification of emissions by installation and by source operation.

(J) All terms beginning with "J."

1. Janitorial cleaning—The cleaning of building or facility components such as the floors, ceilings, walls, windows, doors, stairs, bathrooms, kitchens, etc. in nonmanufacturing areas.

2. Jet engine test cell—A stationary jet engine used for the purpose of research and testing.

3. Jobbing cupola—A cupola which has a single melting cycle operated no more than ten (10) hours in any consecutive twenty-four (24) hours and no more than fifty (50) hours in any consecutive seven (7) days.

(L) All terms beginning with "L."

1. Lacquers—A surface coating that is basically solutions of nitrocellulose in VOCs, with plasticizers and other resins added to improve the quality of the film.

2. Laminate—A product made by bonding together two (2) or more layers of material.

3. Landfill—An area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under 40 CFR 257.2.

4. Large HMIWI—An HMIWI whose maximum design waste burning capacity is more than five hundred pounds (500 lbs) per hour, or a continuous or intermittent HMIWI whose maximum charge rate is more than five hundred pounds (500 lbs) per hour, or a batch HMIWI whose maximum charge rate is more than four thousand pounds (4,000 lbs) per day. The following are not large HMIWI: a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to five hundred pounds (500 lbs) per hour; or a batch HMIWI whose maximum charge rate is less than or equal to four thousand pounds (4,000 lbs) per day.

5. Lateral expansion—A horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

6. Lean-burn engine—Any two (2)- or four (4)-stroke spark-ignited (SI) engine with greater than four percent (4%) oxygen in the engine exhaust.

7. Letterpress printing—A printing process in which the image area is raised relative to the non-image area, and the ink is transferred to the substrate directly from the image surface.

8. Licensed emissions inspection station—Any business that has met the licensing requirements as specified and been licensed to offer vehicle emissions inspection services on behalf of the department.

9. Licensed emissions inspector—Any individual that has met the licensing requirements as specified and been licensed to conduct vehicle emissions inspections on behalf of the department.

10. Life-of-the-unit, firm power contractual arrangement—A unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy from any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract—

A. For the life of the unit;

B. For a cumulative term of no less than thirty (30) years, including contracts that permit an election for early termination; or

C. For a period equal to or greater than twenty-five (25) years or seventy percent (70%) of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

*[2.]***11.** Light*[-]* duty truck **(LDT)**—Any motor vehicle rated at eight thousand five hundred pounds (8,500 lbs*[.]*) gross weight or less *[or a derivation of this vehicle which is designed primarily for the purpose of transportation of property]***, and which has a basic vehicle frontal area of forty-five (45) square feet or less, which is—**

A. Designed primarily for purposes of transportation of property or is a derivation of such a vehicle;

B. Designed primarily for transportation of persons and has a capacity of more than twelve (12) persons; or

C. Available with special features enabling off-street or off-highway operation and use.

12. Light duty vehicle (LDV)—A passenger car or passenger car derivative capable of seating twelve (12) passengers or less that is rated at six thousand pounds (6,000 lbs) GVWR or less.

13. Light liquid volatile organic compound (VOC)—A fluid VOC with a vapor pressure greater than 0.3 kilopascals (kPa) at twenty degrees Celsius (20 °C).

14. Light liquid volatile organic compound (VOC) service—A component shall be considered in such service if it contacts a process fluid containing ten percent (10%) or greater light liquid VOC by weight.

15. Liquid fuel—A combustible liquid that includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

*[3.]***16.** Liquid-mounted seal—A primary **foam- or liquid-filled** seal mounted in continuous contact with the liquid between the *[tank]* wall **of the storage vessel** and the floating roof around the circumference of the tank.

17. Lithographic printing—A planographic printing process where the image and non-image areas are chemically differentiated; the image area is oil receptive and the non-image area is water receptive. This method differs from other printing methods, where the image is typically printed from a raised or recessed surface. Offset lithographic printing is the only common type of lithographic printing used for commercial printing.

18. Load/unload locations—Distribution centers, warehouses, retail stores, railroad facilities, ports, and any other sites where heavy duty diesel vehicles may idle their engines while waiting to load or unload.

19. Local air quality modeling analysis—an assessment of localized impacts on a scale smaller than the entire nonattainment or maintenance area, including, for example, congested roadways on a federal facility, which uses an air quality dispersion model (e.g., Industrial Source Complex Model or Emission and Dispersion Model System) to determine the effects of emissions on air quality.

20. Long-dry kiln—A kiln fourteen feet (14') or larger in diameter, four hundred feet (400') or greater in length, which employs no preheating of the feed and the inlet feed to the kiln is dry.

21. Long-wet kiln—A kiln fourteen feet (14') or larger in diameter, four hundred feet (400') or greater in length, which employs no preheating of the feed and the inlet feed to the kiln is a slurry.

22. Low-bake coating—A coating designed to cure at temperatures below one hundred ninety-four degrees Fahrenheit (194 °F).

23. Low-level radioactive waste—Waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or state standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

24. Low-NO_x burners—A type of burner (a device that functions as an injector of fuel and combustion air into a boiler or kiln to produce a flame that burns as close as possible to the center line of the boiler or kiln) that has a series of channels or orifices that 1) allow for the adjustment of the volume, velocity, pressure, and/or direction of the air carrying the fuel, known as primary air, into the boiler or kiln and 2) impart high momentum and turbulence to the fuel stream to facilitate mixing of the fuel and secondary air.

*[4.]***25.** Lower explosive limit (LEL)—The lower limit of flammability of a gas or vapor at ordinary ambient temperatures expressed in percent of the gas or vapor in air by volume.

*[5.]***26.** Lowest achievable emission rate (LAER)—That rate of emissions which reflects—

A. The most stringent emission limitation which is contained in any state implementation plan for a class or category of source, unless the owner or operator of the proposed source demonstrates that the limitations are not achievable; or

B. The most stringent emission limitation which is achieved in practice by the class or category of source, whichever is more stringent. LAER shall not be less stringent than the new source performance standard limit.

27. Low vapor pressure hydrocarbon-based cleaning solvent—A cleaning solvent that is composed of a mixture of photochemically reactive hydrocarbons and oxygenated hydrocarbons and has a maximum vapor pressure of seven millimeters of mercury (7 mmHg) at twenty degrees Celsius (20 °C). These cleaners must not contain hazardous air pollutants.

(M) All terms beginning with "M."

1. MACT (Maximum achievable control technology)—The maximum degree of reduction in emissions of the hazardous air pollutants listed in subsection (3)(C) of this rule (including a prohibition on these emissions where achievable), taking into consideration the cost of achieving emissions reductions and any non-air quality health and environmental impacts and requirements, determines is achievable for new or existing sources in the category or subcategory to which this emission standard applies, through application of measures, processes, methods, systems, or techniques including, but not limited to, measures which*[—]***:**

A. Reduce the volume of or eliminate emissions of pollutants through process changes, substitution of materials, or other modifications;

B. Enclose systems or processes to eliminate emissions;

C. Collect, capture, or treat pollutants when released from a process, stack, storage, or fugitive emissions point;

D. Are design, equipment, work practice, or operational standards (including requirements for operational training or certification); or

E. Are a combination of subparagraphs (2)(M)1.A.–D.

2. Maintenance area—An area that was designated as nonattainment and has been re-designated in 40 CFR 81 to attainment, meeting the provisions of section 107(d)(3)(E) of the Act and has a maintenance plan approved under section 175A of the Act.

3. Maintenance operation—Normal routine maintenance on any stationary internal combustion engine or the use of an emergency standby engine and fuel system during testing, repair, and routine maintenance to verify its readiness for emergency standby use.

4. Maintenance plan—A revision to the applicable Missouri State Implementation Plan (SIP), meeting the requirements of section 175A of the CAA.

*[2.]***5.** Major modification—Any physical change or change in the method of operation at an installation or in the attendant air pollution control equipment that would result in a significant net emissions increase of any pollutant. A physical change or a change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

A. Routine maintenance, repair, and replacement of parts;

B. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, a prohibition under the Power Plant and Industrial Fuel Use Act of 1978, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

C. Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating the fuel or material, unless the change would be prohibited under any enforceable permit condition which was established after January 6, 1975;

D. An increase in the hours of operation or in the production rate unless the change would be prohibited under any enforceable permit condition which was established after January 6, 1975; or

E. Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act.

*[3.]***6.** Malfunction—A sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal and usual manner. Excess emissions caused by improper design shall not be deemed a malfunction. **For the purpose of 10 CSR 10-6.200 only, malfunction is any sudden, infrequent, and not reasonably-preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions. During periods of malfunction the operator shall operate within established parameters as much as possible, and monitoring of all applicable operating parameters shall continue until all waste has been combusted or until the malfunction ceases, whichever comes first.**

7. Malfunction indicator lamp (MIL)—An amber-colored warning light located on the dashboard of vehicles equipped with On-Board Diagnostics systems indicating to the vehicle operator that the vehicle either has a malfunction or has deteriorated enough to cause a potential increase in the vehicle's tailpipe or evaporative emissions.

*[4.]***8.** Management planner—An individual, under AHERA, who devises and writes plans for asbestos abatement.

*[5.]***9.** Manure storage and application systems—Any system that includes but is not limited to lagoons, manure treatment cells, earthen storage ponds, manure storage tanks, manure stockpiles, composting areas, pits and gutters within barns, litter used in bedding systems, all types of land application equipment, and all pipes, hoses, pumps, and other equipment used to transfer manure.

10. Marine vessel—A craft capable of being used as a means of transportation on water, except amphibious vehicles.

*[6.]***11.** Maskant—A coating applied directly to an aerospace component to protect those areas when etching other parts of the component.

12. Mask coating—A thin film coating applied through a template to coat a small portion of a substrate.

13. Material safety data sheet (MSDS)—The chemical, physical, technical, and safety information document supplied by the manufacturer of the coating, solvent, or other chemical product.

14. Maximum charge rate—For continuous and intermittent HMIWI, one hundred ten percent (110%) of the lowest three (3)-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits; for batch HMIWI, one hundred ten percent (110%) of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

15. Maximum design heat input—The ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

16. Maximum fabric filter inlet temperature—One hundred ten percent (110%) of the lowest three (3)-hour average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

17. Maximum flue gas temperature—One hundred ten percent (110%) of the lowest three (3)-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the mercury (Hg) emission limit.

18. Maximum potential hourly heat input—An hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use Appendix D of 40 CFR 75 to report heat input, this value should be calculated, in accordance with 40 CFR 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 CFR 75, using the maximum potential flow rate and either the maximum carbon dioxide concentration (in percent CO_2) or the minimum oxygen concentration (in percent O_2).

19. Maximum potential NO_x emission rate—The NO_x emission rate of nitrogen oxides (in lb/mmBtu) calculated in accordance with section 3 of Appendix F of 40 CFR 75, using the maximum potential nitrogen oxides concentration as defined in section 2 of Appendix A of 40 CFR 75, and either the maximum oxygen concentration (in percent O_2) or the minimum carbon dioxide concentration (in percent CO_2), under all operating conditions of the unit except for unit start-up, shutdown, and upsets.

20. Maximum rated hourly heat input—A unit-specific maximum hourly heat input (mmBtu) which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.

21. Mechanical shoe seal—A metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

22. Medical device—An instrument, apparatus, implement, machine, contrivance, implant, *in vitro* reagent, or other similar article, including any component or accessory that meets one (1) of the following conditions:

A. It is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease;

B. It is intended to affect the structure or any function of the body; or

C. It is defined in the *National Formulary* or the *United States Pharmacopoeia*, or any supplement to them.

23. Medical/infectious waste—Any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals as exempted in the applicable rule. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR 261; household waste, as defined in 40 CFR 261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in 40 CFR 261.4(a)(1).

A. Cultures and stocks of infectious agents and associated biologicals, including cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

B. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.

C. Human blood and blood products including:

(I) Liquid waste human blood;

(II) Products of blood;

(III) Items saturated and/or dripping with human blood; and

(IV) Items that were saturated and/or dripping with human blood that are now caked with dried human blood including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis, or the development of pharmaceuticals. Intravenous bags are also included in this category.

D. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

E. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals, or testing of pharmaceuticals.

F. Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly-communicable diseases, or isolated animals known to be infected with highly-communicable diseases.

G. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

24. Medium HMIWI—An HMIWI whose maximum design waste burning capacity is more than two hundred pounds (200 lbs) per hour but less than or equal to five hundred pounds (500 lbs) per hour, or a continuous or intermittent HMIWI whose maximum charge rate is more than two hundred pounds (200 lbs) per hour but less than or equal to five hundred pounds (500 lbs) per hour, or a batch HMIWI whose maximum charge rate is more than one thousand six hundred pounds (1,600 lbs) per day but less than or equal to four thousand pounds (4,000 lbs) per day. The following are not medium HMIWI: a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to two hundred pounds (200 lbs) per hour or more than five hundred pounds (500 lbs) per hour; or a batch HMIWI whose maximum charge rate is more than four thousand pounds (4,000 lbs) per day or less than or equal to one thousand six hundred pounds (1,600 lbs) per day.

25. Metal to urethane/rubber molding or casting adhesive—An adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials to fabricate products such as rollers for computer printers or other paper handling equipment.

26. Metallic coating—A coating which contains more than five (5) grams of metal particles per liter of coating as applied. Metal particles are pieces of a pure elemental metal or a combination of elemental metals.

27. Metropolitan planning organization (MPO)—The policy board of an organization created as a result of the designation process in 23 U.S.C. 134(d) and in 49 U.S.C. 5303. It is the forum for cooperative transportation decision-making and is responsible for conducting the planning required under section 174 of the CAA.

28. Mid-kiln firing—Secondary firing in kiln systems by injecting fuel at an intermediate point in the kiln system using a specially-designed fuel injection mechanism for the purpose of decreasing NO_x emissions through—

A. The burning of part of the fuel at a lower temperature; and

B. The creation of reducing conditions at the point of initial combustion.

29. Milestone—The meaning given in sections 182(g)(1) and 189(c)(1) of the CAA. It consists of an emissions level and the date on which it is required to be achieved.

30. Military specification coating—A coating which has a formulation approved by a United States Military Agency for use on military equipment.

31. Minimum dioxin/furan sorbent flow rate—Ninety percent (90%) of the highest three (3)-hour average dioxin/furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

32. Minimum mercury (Hg) sorbent flow rate—Ninety percent (90%) of the highest three (3)-hour average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the Hg emission limit.

33. Minimum horsepower or amperage—Ninety percent (90%) of the highest three (3)-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limit.

34. Minimum hydrogen chloride (HCl) sorbent flow rate—Ninety percent (90%) of the highest three (3)-hour average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

35. Minimum pressure drop across the wet scrubber—Ninety percent (90%) of the highest three (3)-hour average pressure drop across the wet scrubber particulate matter (PM) control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM emission limit.

36. Minimum reagent flow rate—Ninety percent (90%) of the highest three (3)-hour average reagent flow rate at the inlet to the selective noncatalytic reduction technology (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the NO_x emissions limit.

37. Minimum scrubber liquor flow rate—Ninety percent (90%) of the highest three (3)-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits.

38. Minimum scrubber liquor pH—Ninety percent (90%) of the highest three (3)-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all HCl emission limits.

39. Minimum secondary chamber temperature—Ninety percent (90%) of the highest three (3)-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, carbon monoxide (CO), dioxin/furan, and NO_x emission limits.

40. Minor violation—A violation which possesses a small potential to harm the environment or human health or cause pollution, was not knowingly committed, and is not defined by the United States Environmental Protection Agency as other than minor.

41. Missouri Decentralized Analyzer System (MDAS)—The emissions inspection equipment that is sold by the state's contractor to licensed emissions inspection stations. The department may approve alternative equipment if the equipment described in this subsection is no longer available. At a minimum, the vehicle emissions inspection equipment shall consist of the following contractor equipment package:

A. At least a seventeen-inch (17") Liquid Crystal Display (LCD) monitor;

B. Universal serial bus (USB) lane camera;

C. At least a four (4.0) megapixel digital camera and dock;

D. Fingerprint scanner;

E. Two hundred fifty-six (256)-megabyte USB flash drive;

F. Keyboard with plastic keyboard cover and optical mouse;

G. Printer with ink or toner cartridges and blank paper;

H. 2D barcode reader;

I. Windshield sticker printer with blank windshield stickers and thermal cartridge;

J. OBD vehicle interface cable with a standard Society of Automotive Engineers J1962/J1978 OBD connector;

K. OBD verification tool;

L. Low-speed or high-speed Internet connection capabilities;

M. Surge protector and uninterruptible power supply (UPS);

N. At least a three-gigahertz (3.0 GHz) personal computer (DellTM Pentium® 4 or equivalent), with Windows Vista® and one (1) gigabyte of Random Access Memory (RAM); and

O. Metal cabinet to hold all of the components described in this subsection of the rule.

42. Missouri Department of Revenue (MDOR)—The state agency responsible for the oversight of vehicle registration at contract offices and via the Internet. This agency is also responsible for the registration denial method of enforcement for the vehicle emissions inspection and maintenance program.

43. Missouri State Highway Patrol (MSHP)—The state agency responsible for the oversight of the vehicle safety inspection program and joint oversight with the department of the vehicle emissions inspection and maintenance program.

44. Mitigation measure—any method of reducing emissions of the pollutant or its precursor taken at the location of the federal action and used to reduce the impact of the emissions of that pollutant caused by the action.

45. Mobile equipment—Any equipment that is physically capable of being driven or drawn on a roadway including, but not limited to, the following types of equipment:

A. Construction vehicles such as mobile cranes, bulldozers, concrete mixers, etc.;

B. Farming equipment such as a wheel tractor, plow, pesticide sprayer, etc.;

C. Hauling equipment such as truck trailers, utility bodies, etc.; and

D. Miscellaneous equipment such as street cleaners, golf carts, etc.

*[7.]***46.** Model year—*[The annual production period of new motor vehicles designated by the calendar year in which the period ends, provided that if the manufacturer does not so designate vehicles manufactured by him/her, the model year with respect to the vehicles shall mean the twelve (12)-month period beginning January 1 of the year specified in this rule.]* **The manufacturer's annual production period which includes January 1 of such calendar year. If the manufacturer has no annual production period, model year shall refer to the calendar year.**

47. Modeling domain—A geographic area covered by an air quality model.

*[8.]***48.** Modification—Any physical change, or change in method of operation of, a source operation or attendant air pollution control equipment which would cause an increase in potential emissions of any air pollutant emitted by the source operation. **For the purpose of 10 CSR 10-5.490 only, modification is an increase in the permitted volume design capacity of the landfill by either horizontal or vertical expansion based on its most recent permitted design capacity; modification does not occur until the owner or operator commences construction on the horizontal or vertical expansion.**

*[9.]***49**. Modification, Title I—See Title I modification.

50. Modified HMIWI—Any change to an HMIWI unit after the effective date of these standards such that the cumulative costs of the modifications, over the life of the unit, exceed fifty percent (50%) of the original cost of the construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or the change involves a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under section 129 or section 111 of the CAA.

51. Mold seal coating—The initial coating applied to a new mold or a repaired mold to provide a smooth surface which, when coated with a mold-release coating, prevents products from sticking to the mold.

52. Monitoring system—Any monitoring system that meets the requirements as described in a specific rule, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

53. Monthly throughput—The total volume of gasoline that is loaded into all gasoline storage tanks during a month, as calculated on a rolling thirty (30)-day average.

54. MOPETP—The Missouri Performance Evaluation Test Procedures, a set of standards and test procedures for evaluating performance of Stage I/II vapor recovery control equipment and systems to be installed or that have been installed in Missouri.

*[10.]***55.** Motor tricycle—A motor vehicle operated on three (3) wheels, including a motorcycle with any conveyance, temporary or otherwise, requiring the use of a third wheel.

*[11.]***56.** Motor vehicle—Any self-propelled vehicle.

57. Motor vehicle adhesive—An adhesive, including glass bonding adhesive, used at an installation that is not an automobile or light duty truck assembly coating installation, applied for the purpose of bonding two (2) motor vehicle surfaces together without regard to the substrates involved.

58. Motor vehicle bedliner—A multi-component coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.

59. Motor vehicle cavity wax—A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied into the cavities of the motor vehicle primarily for the purpose of enhancing corrosion protection.

60. Motor vehicle deadener—A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to selected motor vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

61. Motor vehicle gasket/gasket-sealing material—A fluid, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light duty truck gasket/gasket-sealing material includes room temperature vulcanization (RTV) seal material.

62. Motor vehicle glass bonding primer—A primer, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass-bonding adhesives or the installation of adhesive-bonded glass. Motor vehicle glass-bonding primer includes glass-bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass or body openings) prior to the application of adhesive or the installation of adhesive-bonded glass.

63. Motor vehicle lubricating wax/compound—A protective lubricating material, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to motor vehicle hubs and hinges.

64. Motor vehicle sealer—A high viscosity material, used at an installation that is not an automobile or light duty truck assembly coating installation, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). Such materials are also referred to as sealant, sealant primer, or caulk.

65. Motor vehicle truck interior coating—A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to the trunk interior to provide chip protection.

66. Motor vehicle underbody coating—A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.

67. Motor vehicle weatherstrip adhesive—An adhesive, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the motor vehicle.

*[12.]***68.** Motorcycle—A motor vehicle operated on two (2) wheels.

69. Multi-colored coating—A coating which exhibits more than one (1) color when applied and which is packaged in a single container and applied in a single coat.

70. Multi-component coating—A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.

71. Multi-day violation—A violation which has occurred on or continued for two (2) or more consecutive or nonconsecutive days.

72. Multiple-violation penalty—The sum of individual administrative penalties assessed when two (2) or more violations are included in the same complaint or enforcement action.

73. Multipurpose construction adhesive—An adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, and acoustical tile.

74. Municipal solid waste landfill or MSW landfill—An entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of Resource Conservation and Recovery Act (RCRA) Subtitle D wastes, per 40 CFR 257.2, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion.

75. Municipal solid waste landfill emissions or MSW landfill emissions—Gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

(N) All terms beginning with "N."

1. Nameplate capacity—The maximum electrical generating output (expressed as megawatt) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the National Allowance Data Base (NADB) under the data field "NAMECAP" if the generator is listed in the NADB or as measured in accordance with the United States Department of Energy standards. For generators not listed in the NADB, the nameplate capacity shall be used.

2. National ambient air quality standards (NAAQS)—those standards established pursuant to section 109 of the Act and defined by 10 CSR 10-6.010 Ambient Air Quality Standards. It

includes standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone, particulate matter (PM_{10} and $PM_{2.5}$), and sulfur dioxide (SO_2);

3. Natural finish hardwood plywood panel—A panel whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

4. NEPA—the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.).

*[1.]***5.** Nearby—Nearby**,** as used in the definition GEP stack height in subparagraph *[(2)(G)2.B.]* **(2)(G)15.B. of this rule,** is defined for a specific structure or terrain feature—

A. For purposes of applying the formula provided in subparagraph *[(2)(G)3.B.]* **(2)(G)15.B. of this rule**, nearby means that distance up to five (5) times the lesser of the height or the width dimension of a structure, but not greater than one-half (1/2) mile; and

B. For conducting fluid modeling or field study demonstrations under subparagraph *[(2)(G)3.C.]* **(2)(G)15.C. of this rule**, nearby means not greater than one-half (1/2) mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten (10) times the maximum height of the feature, not to exceed two (2) miles if feature achieves a height one-half (1/2) mile from the stack that is at least forty percent (40%) of the GEP stack height determined by the formula provided in subparagraph *[(2)(G)3.B.]* **(2)(G)15.B. of this rule**, or twenty-six meters (26 m), whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

*[2.]***6.** Net emissions increase—This term is defined in 40 CFR 52.21(b)(3), promulgated as of July 1, 2003, and hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

7. New—As defined for the purposes of 10 CSR 10-2.040 and 10 CSR 10-5.030, any source which is not an existing source, as defined in subsection (1)(E) of 10 CSR 10-2.040 or 10 CSR 10-5.030.

8. New Source Review (NSR)—The permitting requirements found in state rule 10 CSR 10-6.060 Construction Permits Required.

9. NMOC—Nonmethane organic compounds. Precursors to oxidant formation. They allow ozone to accumulate in the atmosphere.

10. Nonaqueous solvent—Any solvent not classifiable as an aqueous solvent as defined by a solvent in which water is the primary ingredient (greater than eighty percent (80%) by weight or greater than sixty percent (60%) by volume of solvent solution as applied must be water). Aqueous solutions must have a flash point greater than ninety-three degrees Celsius (93 °C) (two hundred degrees Fahrenheit (200 °F)) (as reported by the manufacturer) and the solution must be miscible with water.

*[3.]***11.** Nonattainment area **(NAA)**—*[Those]* **Any** geographic area*[s in Missouri that have officially been designated by the U.S. Environmental Protection Agency]* **of the United States which has been designated as nonattainment under section 107 of the CAA and described** in 40 CFR *[part]* 81 *[as nonattainment areas]*.

12. Nonattainment pollutant—Each and every pollutant for which the location of the source is in an area designated to be in nonattainment of a National Ambient Air Quality Standard (NAAQS) under section 107(d)(1)(A)(i) of the Act. Any constituent or precursor of a nonattainment pollutant shall be a nonattainment pollutant, provided that the constituent or precursor pollutant may only be regulated as part of regulation of the corresponding NAAQS pollutant. Both volatile organic compounds (VOC) and nitrogen oxides (NO_x) shall be nonattainment pollutants for a source located in an area designated nonattainment for ozone.

13. Nondegradable waste—Any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete, municipal waste combustor ash, and metals.

14. Nonpermanent final finish—A material such as a wax, polish, nonoxidizing oil, or similar substance that must be periodically reapplied to a surface over its lifetime to maintain or restore the reapplied material's intended effect.

15. Non-Title V permit—A federally-enforceable permit administered by the director pursuant to the CAA and regulatory authority under the CAA, other than Title V of the CAA and 40 CFR 70 or 40 CFR 71.

16. Normal maintenance—Repair or replacement of vapor recovery control equipment and/or gasoline dispensing components/dispensers that does not require breaking of concrete (by any method) and does not require removal of dispenser(s) from island(s).

17. Normal source operation—The average actual activity rate of a source necessary for determining the actual emissions rate for the two (2) years prior to the date necessary for determining actual emissions, unless some other time period is more representative of the operation of the source or otherwise approved by the staff director.

18. Normally-closed container—A storage container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

19. NO_x allowance—An authorization by the department or the administrator under a NO_x trading program to emit one (1) ton of NO_x during the control period of the specified year or of any year thereafter.

20. NO_x allowance deduction or deduct NO_x allowances—The permanent withdrawal of NO_x allowances by the administrator from a NO_x allowance tracking system compliance account or overdraft account to account for the number of tons of emissions from a NO_x budget unit for a control period, determined in accordance with a rule, or for any other NO_x allowance surrender obligation required.

21. NO_x allowance tracking system—The system by which the director or the administrator records allocations, deductions, and transfers of NO_x allowances under a NO_x trading program.

22. NO_x allowance tracking system account—An account in the NO_x allowance tracking system established by the director or administrator for purposes of recording the allocation, holding, transferring, or deducting of NO_x allowances.

23. NO_x allowances held—The NO_x allowances recorded by the director or administrator, or submitted to the director or administrator for recordation, in accordance with a rule, in a NO_x allowance tracking system account.

24. NO_x authorized account representative—The natural person who is authorized by the owners or operators of the source and all NO_x budget units at the source, in accordance with all applicable rules, to represent and legally bind each owner and operator in matters pertaining to a NO_x trading program or, for a general account, the natural person who is authorized, to transfer or otherwise dispose of NO_x allowances held in the general account in accordance with the applicable rules.

25. NO_x budget emissions limitation—For a NO_x budget unit, the tonnage equivalent of the NO_x allowances available for compliance deduction for the unit and for a control period adjusted by any deductions of such NO_x allowances to account for actual utilization for the control period or to account for excess emissions for a prior control period or to account for withdrawal from the NO_x budget program or for a change in regulatory status for an affected unit.

26. NO_x budget permit—The legally-binding and federally-enforceable written document, or portion of such document,

issued by the director, including any permit revisions, specifying the NO_x budget trading program requirements applicable to a NO_x budget source, to each NO_x budget unit at the NO_x budget source, and to the owners and operators and the NO_x authorized account representative of the NO_x budget source and each NO_x budget unit.

27. NO_x budget source—A source that includes one (1) or more NO_x budget units.

28. NO_x budget trading program—A multi-state nitrogen oxides air pollution control and emission reduction program pursuant to 40 CFR 51.121, as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor.

29. NO_x budget unit—A unit that is subject to the NO_x budget trading program emissions limitation under section (1) or paragraph (3)(H)1. of 10 CSR 10-6.360.

30. NO_x emission rate—The amount of NO_x emitted by a combustion unit in pounds per million British thermal units of heat input as recorded by approved monitoring devices.

31. NO_x emissions limitation—For an affected unit, the tonnage equivalent of the NO_x emissions rate available for compliance deduction for the unit and for a control period adjusted by any deductions of such NO_x allowances to account for actual utilization for the control period or to account for excess emissions for a prior control period or to account for withdrawal from a NO_x trading program or for a change in regulatory status for an affected unit.

32. NO_x opt-in unit—An EGU whose owner or operator has requested to become an affected unit under a NO_x trading program and has been approved by the department.

33. NO_x unit—Any fossil-fuel-fired stationary boiler, combustion turbine, internal combustion engine, or combined cycle system.

(O) All terms beginning with "O."

1. Offset—A decrease in actual emissions from a source operation or installation that is greater than the amount of emissions anticipated from a modification or construction of a source operation or installation. The decrease must be of the same pollutant and have substantially-similar environmental and health effects on the impacted area. Any ratio of decrease to increase greater than one to one (1:1) constitutes offset. The exception to this are ozone nonattainment areas where VOC and NO_x emissions will require an offset ratio of actual emission reduction to new emissions according to the following schedule: marginal area = 1.1:1; moderate area = 1.15:1; serious area = 1.2:1; severe area = 1.3:1; and extreme area = 1.5:1.

2. Offset printing—A lithographic printing process that transfers the ink film from the lithographic plate to an intermediary surface (rubber-covered blanket cylinder), which, in turn, transfers the ink film to the substrate.

*[2.]***3.** Offtake—Any set of piping (for example, standpipes, goosenecks) that interconnects a coke oven with a collecting main which is common to all systems. The offtake system extends from the connection on top of the coke oven to the connection on the collecting main.

4. On-Board Diagnostics (OBD)—A vehicle emissions early-warning system required by federal law to be installed on all light duty 1996 and newer model year vehicles for sale in the United States. The OBD system monitors sensors and emissions-control related components on a vehicle to ensure that the emissions control system operates properly throughout a vehicle's lifetime. If one (1) or more components of the emissions control system malfunctions or deteriorates, the OBD system will illuminate the Malfunction Indicator Lamp (MIL) and store one (1) or more Diagnostic Trouble Codes (DTCs).

5. On-Board Diagnostics (OBD) test—A test in which a vehicle's OBD system is connected to a handheld tool or computer that an inspector uses to determine and/or collect and record—

A. The status of the OBD system's MIL when the vehicle engine is off and when the vehicle engine is running;

B. Data link connector access and functionality and OBD communication;

C. Vehicle signature information, including, but not limited to, the electronic vehicle identification number (VIN) and other unique parameter identifiers;

D. The status of all of the OBD system's readiness monitors;

E. The OBD system's MIL command status; and

F. Any DTCs, including those that are commanding the MIL to be illuminated.

6. Onboard refueling vapor recovery (ORVR)—A system on motor vehicles designed to recover hydrocarbon vapors that escape during refueling.

7. Onboard refueling vapor recovery (ORVR) compatible—A Stage II vapor recovery system certified by CARB or other acceptable independent third-party evaluator, using test methods approved by the director, as ORVR compatible which maintains a required minimum overall system efficiency of ninety-five percent (95%), as certified under third-party evaluation, while dispensing fuel without difficulty to both ORVR-equipped and non-ORVR-equipped vehicles.

8. One-component coating—A coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

*[3.]***9.** Opacity—The extent to which airborne material obstructs the transmission of incident light and obscures the visual background. Opacity is stated as a percentage of light obstructed and can be measured by a continuous opacity monitoring system or a trained observer. An opacity of one hundred percent (100%) represents a condition in which no light is transmitted, and the background is completely obscured.

*[4.]***10.** Open burning—The burning of any materials where air contaminants resulting from combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. For purposes of this definition, a chamber shall be regarded as enclosed, when, during the time combustion takes place, only those apertures, ducts, stacks, flues, or chimneys**,** as are necessary to provide combustion air and to permit the escape of exhaust gases**,** are open.

*[5.]***11.** Open-top vapor degreaser—A type of degreaser which consists of a tank where solvent is heated to its boiling point which creates a zone of solvent vapor contained by a set of cooling coils. Condensation of the hot solvent vapor cleans or degreases the colder metal parts.

12. Operating—With regard to a unit under part (3)(C)3.D.(II) and paragraph (3)(H)1. of 10 CSR 10-6.360, having documented heat input for more than eight hundred seventy-six (876) hours in the six (6) months immediately preceding the submission of an application for an initial NO_x budget permit under subparagraph (3)(H)4.A. of 10 CSR 10-6.360.

13. Operating day—A twenty four (24)-hour period between 12:00 midnight and the following midnight during which any amount of hospital waste or medical/infectious waste is combusted at any time in the HMIWI.

14. Operating parameter value—A minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one (1) or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limit.

15. Operation—The period during which waste is combusted in the incinerator excluding periods of startup or shutdown.

16. Operator—Any person who operates, controls, or supervises a NO_x budget unit, a NO_x budget source, or an affected unit under a NO_x trading program, and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

17. Opt-in—To voluntarily become an affected unit under a NO_x trading program.

18. Optical coating—A coating applied to an optical lens.

19. Optical device—An optical element used in an electro-optical device and designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes in light energy levels.

20. Organic solvent—A liquid containing volatile organic compounds that is used for dissolving or dispersing constituents in a coating, adjusting the viscosity of a coating, cleaning, or washoff. When used in a coating, the organic solvent evaporates during drying and does not become a part of the dried film.

21. Output—The shaft work output from any engine plus the energy reclaimed by any useful heat recovery system.

*[6.]***22.** Outstate area—Any area throughout the state except the City of St. Louis and St. Charles, St. Louis, Jefferson, Franklin, Clay, Cass, Buchanan, Ray, Jackson, Platte, and Greene counties.

23. Outdoor floor covering installation adhesive—Any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.

24. Overall control efficiency—The efficiency of a control system, calculated as the product of the capture and control device efficiencies, expressed as a percentage.

25. Overdraft account—The NO_x allowance tracking system account established by the director or administrator for each NO_x budget source where there are two (2) or more NO_x budget units or for each NO_x authorized account representative.

*[7.]***26.** Owner or operator—Any person who owns, leases, operates, controls, or supervises an air contaminant source. **For the purpose of 10 CSR 10-6.360 only, owner is any of the following persons:**

A. Any holder of any portion of the legal or equitable title in a NO_x budget unit;

B. Any holder of a leasehold interest in a NO_x budget unit;

C. Any purchaser of power from a NO_x budget unit under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the NO_x budget unit; or

D. With respect to any general account, any person who has an ownership interest with respect to the NO_x allowances held in the general account and who is subject to the binding agreement for the NO_x authorized account representative to represent that person's ownership interest with respect to NO_x allowances.

27. Ozone season—From May 1 through September 30 of each year.

(P) All terms beginning with "P."

1. Pail—Any nominal cylindrical container of one to twelve (1–12)-gallon capacity.

2. Paint—A pigmented surface coating using VOCs as the major solvent and thinner which converts to a relatively opaque solid film after application as a thin layer.

3. Pan-backing coating—A coating applied to the surfaces of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.

4. Paper, film, and foil coating—A web coating process that applies a continuous layer of coating material across essentially the entire width or any portion of the width of a web substrate to—

A. Provide a covering, finish, or functional or protective layer to a substrate;

B. Saturate a substrate for lamination; or

C. Provide adhesion between two (2) substrates for lamination.

*[3.]***5.** Part 70—U.S. Environmental Protection Agency regulations, codified at 40 CFR *[part]* 70, setting forth requirements for state operating permit programs pursuant to Title V of the Act.

6. Part 70 installations—Installations to which the part 70 operating permit requirements of rule 10 CSR 10-6.065 apply, in accordance with the following criteria:

A. They emit or have the potential to emit, in the aggregate, ten (10) tons per year (tpy) or more of any hazardous air pollutant, other than radionuclides, or twenty-five (25) tpy or more of any combination of these hazardous air pollutants or such lesser quantity as the administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not these units are in a contiguous area or under common control, to determine whether these units or stations are subject installations. For sources of radionuclides, the criteria shall be established by the administrator;

B. They emit or have the potential to emit one hundred (100) tpy or more of any air pollutant, including all fugitive air pollutants. The fugitive emissions of an installation shall not be considered unless the installation belongs to one (1) of the source categories listed in 10 CSR 10-6.020(3)(B), Table 2;

C. They are located in nonattainment areas or ozone transport regions.

(I) For ozone nonattainment areas, sources with the potential to emit one hundred (100) tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," fifty (50) tpy or more in areas classified as "serious," twenty-five (25) tpy or more in areas classified as "severe," and ten (10) tpy or more in areas classified as "extreme"; except that the references in this paragraph to one hundred (100), fifty (50), twenty-five (25), and ten (10) tpy of nitrogen oxides shall not apply with respect to any source for which the administrator has made a finding, under section 182(f)(1) or (2) of the Act, that requirements under section 182(f) of the Act do not apply;

(II) For ozone transport regions established pursuant to section 184 of the Act, sources with the potential to emit fifty (50) tpy or more of volatile organic compounds;

(III) For carbon monoxide nonattainment areas that are classified as "serious," and in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the administrator, sources with the potential to emit fifty (50) tpy or more of carbon monoxide; and

(IV) For particulate matter less than ten (10) micrometers (PM_{10}) nonattainment areas classified as "serious," sources with the potential to emit seventy (70) tpy or more of PM_{10};

D. They are affected sources under Title IV of the 1990 Act;

E. They are solid waste incinerators subject to section 129(e) of the Act;

F. Any installation in a source category designated by the administrator as a part 70 source pursuant to 40 CFR 70.3; and

G. Installations that would be part 70 sources strictly due to the following criteria are not subject to part 70 source requirements until the administrator subjects this installation to these requirements by rule:

(I) They are subject to a standard, limitation or other requirement under section 111 of the Act, including area sources; or

(II) They are subject to a standard or other requirement under section 112 of the Act, except that a source, including an area source, is not required to obtain a permit solely because it is subject to rules or requirements under section 112(r) of the Act.

*[4.]***7.** Particulate matter—Any material, except uncombined water, that exists in a finely-divided form as a liquid or solid and as

specifically defined as follows:

A. PM—any airborne, finely-divided solid or liquid material with an aerodynamic diameter smaller than one hundred (100) micrometers as measured in the ambient air as specified in 10 CSR 10-6.040(4)(B); and

B. PM_{10}—particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured in the ambient air as specified in 10 CSR 10-6.040(4)(J); and

C. $PM_{2.5}$—particulate matter with an aerodynamic diameter less than or equal to a nominal two and one-half (2.5) micrometers including the filterable component as measured in the ambient air as specified in 10 CSR 10-6.040(4)(L).

For the purpose of 10 CSR 10-6.200 only, particulate matter, or PM, is the total particulate matter emitted from an HMIWI as measured by EPA Reference Method 5 of 40 CFR 60, Appendix A–3 or EPA Reference Method 29 of 40 CFR 60, Appendix A-8.

8. Passenger tire equivalent (PTE)—The weight of waste tires or parts of waste tires equivalent to the average weight of one (1) passenger tire. The average weight of one (1) passenger tire is equal to twenty pounds (20 lbs).

9. Passenger vehicle—Every motor vehicle, except motorcycles, motor-driven cycles, and ambulances, designed for carrying ten (10) passengers or less and used for the transportation of persons.

10. Passive collection system—A gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

11. Pathological waste—Waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable).

12. Peak load—The maximum instantaneous operating load.

13. Peak ozone season—The time period (the months of June 1 through August 31) used in calculating ozone nonattainment area emissions on Emissions Inventory Questionnaire Form 2.0Z.

14. Peaking combustion unit—A combustion turbine normally reserved for operation during the hours of highest daily, weekly, or seasonal loads.

15. Perimeter bonded sheet flooring installation—The installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four inches (4") wide around the perimeter of the sheet flooring.

*[5.]***16.** Permanent shutdown—The permanent cessation of operation of any air pollution control equipment or process equipment, not to be placed back into service or have a start-up.

17. Permitted capacity factor—The annual permitted fuel use divided by the manufacturers' specified maximum fuel consumption times eight thousand seven hundred sixty (8,760) hours per year.

*[6.]***18.** Permitting authority—Either the administrator or the state air pollution control agency, local agency, or other agency authorized by the administrator to carry out a permit program as intended by the Act.

*[7.]***19.** Person—Any individual, partnership, **copartnership,** association, **firm, company, public or private** corporation including the parent company of a wholly-owned subsidiary, **joint stock company,** municipality, **political** subdivision, *[or]* agency**, board, department or bureau** of the state **or federal government**, trust, estate, or other legal entity either public or private **which is recognized by law as the subject of rights and duties**. This shall include any legal successor, employee, or agent of the previous entities.

[8.] **20.** Petroleum liquid—Petroleum, condensate**,** and any finished or intermediate products manufactured in a petroleum refinery with the exception of Numbers 2–6 fuel oils as specified in ASTM D (396-69), gas turbine fuel oils Number 2-GT–4-GT, as specified in ASTM D(2880-71), and diesel fuel oils Number 2-D and 4-D, as specified in ASTM D(975-68).

*[9.]***21.** Petroleum refinery—Any facility which produces gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

*[10.]***22.** Pharmaceutical—Any compound or preparation included under the Standard Industrial Classification Codes 2833 (Medicinal Chemicals and Botanical Products) and 2834 (Pharmaceutical Preparations), excluding products formulated by fermentation, extraction from vegetable material or animal tissue, or formulation and packaging of the final product.

*[11.]***23.** Pilot plants—The installations which are of new type or design which will serve as a trial unit for experimentation or testing.

*[12.]***24.** Plant-mix—A mixture produced in an asphalt mixing plant that consists of mineral aggregate uniformly coated with asphalt cement, cutback asphalt, or emulsified asphalt.

25. Plastic—A synthetic material chemically formed by the polymerization of organic substances and capable of being molded, extruded, cast into various shapes and films, or drawn into filaments.

26. Plastic foam—Foam constructed of plastics.

27. Plastic solvent welding adhesive—An adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

28. Plastic solvent welding adhesive primer—A primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.

29. Pleasure craft—A marine vessel which is manufactured or operated primarily for recreational purposes or leased, rented, or chartered to a person or business for recreational purposes.

30. Pleasure craft coating—A marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller, or other means to a pleasure craft.

*[13.]***31.** Pollutant—An air contaminant listed in 10 CSR 10-6.020(3)(A), Table 1 without regard to levels of emission or air quality impact.

*[14.]***32.** Polyethylene bag sealing operation—Any operation or facility engaged in the sealing of polyethylene bags, usually by the use of heat.

*[15.]***33.** Polystyrene resin—The product of any styrene polymerization process, usually involving heat.

34. Polyvinyl chloride (PVC) plastic—A polymer of the chlorinated vinyl monomer that contains fifty-seven percent (57%) chlorine.

35. Polyvinyl chloride welding adhesive—An adhesive intended by the manufacturer for use in the welding of PVC plastic pipe.

36. Porous material—A substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, paper and corrugated paperboard. For the purposes of 10 CSR 10-5.330, porous material does not include wood.

*[16.]***37.** Portable equipment—Any equipment that is designed and maintained to be movable, primarily for use in noncontinuous operations. Portable equipment includes rock crushers, asphaltic concrete plants, and concrete batching plants.

*[17.]***38.** Portable equipment installation—An installation made up solely of portable equipment, meeting the requirements of or having been permitted according to 10 CSR 10-6.060(4).

39. Portland cement—A hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one (1) or more of the forms of calcium sulfate as an interground addition.

40. Portland cement kiln—A system, including any solid, gaseous, or liquid fuel combustion equipment, used to calcine and fuse raw materials, including limestone and clay, to produce Portland cement clinker.

*[18.]***41.** Positive crankcase ventilation system—Any system or device which prevents the escape of crankcase emissions to the ambient air.

*[19.]***42.** Potential to emit—The emission rates of any pollutant at maximum design capacity. Annual potential shall be based on the maximum annual-rated capacity of the installation assuming continuous year-round operation. Federally-enforceable permit conditions on the type of materials combusted or processed, operating rates, hours of operation, and the application of air pollution control equipment shall be used in determining the annual potential. Secondary emissions do not count in determining annual potential.

*[20.]***43.** Potroom—A building unit which houses a group of electrolytic cells in which aluminum is produced.

*[21.]***44.** Potroom group—An uncontrolled potroom, a potroom which is controlled individually, or a group of potrooms or potroom segments ducted to a common or similar control system.

45. Precursors of a criteria pollutant are—

A. For ozone, nitrogen oxides (NO_x), unless an area is exempted from NO_x requirements under section 182(f) of the CAA, and volatile organic compounds (VOCs);

B. For PM_{10}, those pollutants described in the PM_{10} nonattainment area applicable SIP as significant contributors to the PM_{10} levels; and

C. For $PM_{2.5}$—

(I) Sulfur dioxide (SO_2) in all $PM_{2.5}$ nonattainment and maintenance areas;

(II) Nitrogen oxides in all $PM_{2.5}$ nonattainment and maintenance areas unless both the state and EPA determine that it is not a significant precursor; and

(III) Volatile organic compounds (VOC) and ammonia (NH_3) only in $PM_{2.5}$ nonattainment or maintenance areas where either the state or EPA determines that they are significant precursors.

46. Predictive emissions monitoring system (PEMS)—A system that uses process and other parameters as inputs to a computer program or other data reduction system to predict values in terms of the applicable emission limitation or standard.

47. Prefabricated architectural component coating—A coating applied to metal parts and products which are to be used as an architectural structure.

48. Preheater/precalciner kiln—A kiln where the feed to the kiln system is preheated in cyclone chambers and that utilizes a second burner to provide heat for calcination of material prior to the material entering the rotary kiln which forms clinker.

49. Preheater kiln—A kiln where the feed to the kiln system is preheated in cyclone chambers prior to the final fusion, which forms clinker.

50. Press—A printing production assembly that can be made up of one (1) or many units to produce a finished product.

51. Pretreatment coating—A coating which contains no more than twelve percent (12%) solids by weight, but at least one-half percent (0.5%) acids by weight, is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

52. Pretreatment wash primer—A coating which contains no more than twenty-five percent (25%) solids by weight, but at least one-tenth of a percent (0.1%) acids by weight, is used to provide surface etching, and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.

*[22.]***53.** Primary aluminum reduction installation—Any facility manufacturing aluminum by electrolytic reduction of alumina.

54. Primary chamber—The chamber in an HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed.

55. Primary fuel—The fuel that provides the principal heat input to the device. To be considered primary, the fuel must be able to sustain operation without the addition of other fuels.

*[23.]***56.** Primer—The first *[surface]* **layer and any subsequent layers of identically-formulated** coating applied to the *[surface.]* **article to provide corrosion resistance, surface etching, surface leveling, adhesion promotion, or other property depending on the end use or exposure of the final product. Primers that are defined as specialty coatings are not included under this definition.**

*[24.]***57.** Primer-surfacer**—***[The surface coatings applied over the primer and beneath the topcoat.]* **An intermediate protective coating applied over the electrodeposition primer and under the topcoat at an automobile or light duty truck assembly coating facility. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish. Primer-surfacer may also be called guide coat or surfacer.**

58. Printed interior panel—A panel whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

59. Printing—Any operation that imparts color, images, or text onto a substrate using printing inks.

60. Printing ink—Any fluid or viscous composition used in printing, impressing, or transferring an image onto a substrate. Varnishes and coatings applied with offset lithographic and letterpress printing presses are inks and are part of the applicable printing process, not a separate operation such as paper coating.

61. Process—Any collection of structures and/or equipment that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one (1) process or production unit.

62. Process heater—Any enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for onsite consumption, or autoclaves.

63. Process unit—For the purpose of 10 CSR 10-5.550 only, equipment assembled and connected by pipes or ducts to produce, as intermediates or final products, one (1) or more SOCMI chemicals (see Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry, EPA-450/4-91-031). A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient product storage facilities.

*[25.]***64.** Process weight—The total weight of all materials introduced into *[a source operation]* **an emission unit,** including solid fuels **which may cause any emission of particulate matter**, but excluding liquids and gases used solely as fuels and *[excluding]* air introduced for purposes of combustion.

65. Process weight rate—A rate in tons per hour established as follows:

A. The rate of materials introduced to the process which may cause any emission of particulate matter;

B. For continuous or long-run steady-state emission units, the total process weight for the entire period of continuous operation or for a typical portion, divided by the number of hours of that period or portion;

C. For cyclical or batch emission units, the total process weight for a period of time which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during that period; or

D. Where the nature of any process or operation or the design of any equipment permits more than one (1) interpretation of this section, that interpretation which results in the minimum value for allowable emission shall apply.

66. Product—For the purpose of 10 CSR 10-5.550 only, any compound or SOCMI chemical (see Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry, EPA-450/4-91-031) that is produced as that chemical for sales as a product, by-product, co-product, or intermediate or for use in the production of other chemicals or compounds.

67. Production—Any collection of structures and/or equipment, that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one (1) process or production unit.

*[26.]***68.** Production equipment exhaust system—A device for collecting and directing out of the work area fugitive emissions from reactor openings, centrifuge openings, and other vessel openings and equipment for the purpose of protecting workers from excessive exposure.

69. Project-specific net emissions increase—The difference between permitted emissions to be emitted by the project that triggered a prevention of significant deterioration review and the baseline emission inventory for the applicable project.

70. Protocol—A replicable and workable method to estimate the mass of emissions reductions, or the amount of ERCs needed for compliance.

71. Public vehicle—Any motor vehicle, other than a passenger vehicle, and any trailer, semi-trailer, or pole trailer drawn by such a motor vehicle, which is designed, used, and maintained for the transportation of persons or property at the public expense and under public control.

*[27.]***72.** Publication rotogravure printing—Rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

*[28.]***73.** Pushing operation—The process of removing coke from the coke oven. The coke-pushing operation begins when the coke-side oven door is removed and is completed when the hot car enters the quench tower and the coke-side oven door is replaced.

74. Pyrolysis—The endothermic gasification of hospital waste and/or medical/infectious waste using external energy.

(Q) All terms beginning with "Q."

1. Qualifying repair—Any repair or adjustment performed on a vehicle's emissions control system after failing an initial emissions inspection that is reasonable to the test method failure. A qualifying repair is submitted as part of a cost-based waiver application and must document, to the department's satisfaction, the diagnostic testing or analysis method used by the person performing the repair. Repairs performed by a repair technician that were not authorized by the vehicle owner's signature or verbal consent may not be considered a qualifying repair. The qualifying repair must be performed within ninety (90) days after the date of initial emissions inspection. The initial or subsequent emissions reinspection should support the necessity of the qualifying repair. The qualifying repair may consist of either—

A. The parts costs, spent by a vehicle owner or charged to a vehicle owner by a repair technician, that are appropriate for the type of emissions inspection failure; or

B. The parts and recognized labor costs, charged to a vehicle owner by a Recognized Repair Technician, that are appropriate for the type of emissions inspection failure.

2. Quantifiable—The quantity of emission reductions can be measured or estimated by accurate and replicable techniques. These techniques shall be at least as accurate and replicable as the techniques accepted by the U.S. EPA, where accepted techniques exist.

(R) All terms beginning with "R."

1. Reactive adhesive—An adhesive system composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least seventy percent (70%) of the liquid components of the system, excluding water, react during the process.

*[1.]***2.** Reactor—A vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.

3. Reactor processes—Unit operations in which one (1) or more chemicals, or reactants other than air, are combined or decomposed in such a way that their molecular structures are altered and one (1) or more new organic compounds are formed.

4. Readiness monitor—A design feature of On-Board Diagnostics systems. If a readiness monitor has been set, then the OBD system has completed a diagnostic check on that component. If a readiness monitor has not been set, then the OBD system has not completed a diagnostic check on that component.

5. Reasonably-foreseeable emissions—Projected future direct and indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known and the emissions are quantifiable, as described and documented by the federal agency based on its own information and after reviewing any information presented to the federal agency.

6. Receive or receipt of—When referring to the director or the administrator, to come into possession of a document, information, or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the director or the administrator in the regular course of business.

7. Recognized labor costs—The labor costs that a Recognized Repair Technician charges for emissions repair services rendered to a vehicle that fails its emissions inspection. Labor costs not tied to an emissions repair or solely for the purposes of setting readiness monitors may not be considered qualifying repairs.

8. Recognized Repair Technician—Any person who—

A. Is professionally engaged full-time in vehicle repair or employed by an ongoing business whose purpose is vehicle repair. A Recognized Repair Technician may only be recognized by the department at one (1) place of employment;

B. Has valid certifications from the National Institute for Automotive Service Excellence (ASE) in Electrical Systems (A6), Engine Performance (A8), and Advanced Engine Performance Specialist (L1) that have not expired; and

C. Has not been reported by the department to the attorney general for unlawful merchandising practices according to subsection 643.330.4, RSMo.

*[2.]***9.** Reconstruction—Where the fixed capital cost of the new components exceeds fifty percent (50%) of the fixed capital cost of a comparable entirely new source of operation or installation; the use of an alternative fuel or raw material by reason of an order in effect under *[S]*sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under *[S]*section 125 of the Clean Air Act, shall not be considered reconstruction. In determining whether a reconstruction will occur, the provisions of 40 CFR 60.15, December 1, 1979, shall be considered by the director.

10. Recordation, record, or recorded—With regard to NO_x allowances, the movement of NO_x allowances by the director or administrator from one (1) NO_x allowance tracking system account to another, for purposes of allocation, transfer, or deduction.

11. Recoverable fuel—Fuels that have been permitted for use for energy recovery under 10 CSR 10-6.065.

12. Recovery device—An individual unit of equipment, such as an adsorber, carbon adsorber, or condenser, capable of and

used for the purpose of recovering chemicals for use, reuse, or sale.

13. Recovery system—An individual recovery device or series of such devices applied to the same vent stream.

14. Recycled on-site—The reuse of an organic solvent in a process other than cleaning or washoff.

15. Reduction—Any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating, and protein concentrating.

16. Reference method—Any method of sampling and analyzing for an air pollutant that is published in Appendix A of 40 CFR 60.

17. Refinishing—The process of coating motor vehicles, or their parts, that is subsequent to the original coating applied at an original equipment manufacturing plant.

*[3.]***18.** Refuse—The garbage, rubbish, trade wastes, leaves, salvageable material, agricultural wastes, or other wastes.

19. Regionally-significant action—A federal action for which the direct and indirect emissions of any pollutant represent ten percent (10%) or more of a nonattainment or maintenance area's emissions inventory for that pollutant;

20. Regional water or wastewater projects—Include construction, operation, and maintenance of water or wastewater conveyances, water or wastewater treatment facilities, and water storage reservoirs which affect a large portion of a nonattainment or maintenance area.

*[4.]***21.** Regulated air pollutant—All air pollutants or precursors for which any standard has been promulgated.

*[5.]***22.** Regulated asbestos-containing material (RACM)—Friable asbestos material; category I nonfriable asbestos-containing material (ACM) that has become friable; category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this rule.

*[6.]***23.** Regulated pollutant—Any regulated air pollutant except carbon monoxide and pollutants regulated exclusively under section 112(r) or Title VI of the Act.

*[7.]***24.** Reid vapor pressure (RVP)—The absolute vapor pressure of a petroleum liquid as determined by "Tests for Determining Reid Vapor Pressure (RVP) of Gasoline and Gasoline-Oxygenate Blends" 40 CFR *[part]* 80, Appendix E as in effect July 1, 1990.

25. Reinforced plastic composite—A composite material consisting of plastic reinforced with fibers.

26. Related cleaning activity—The removal of coating residue or other unwanted materials from equipment related to coating operations as well as the cleaning of spray guns, transfer line, tanks, and the interior of spray booths.

27. Renewable fuel—Renewable energy resources that include but are not limited to solar (photovoltaic), wind, and biomass. Biomass includes but is not limited to: agricultural crops and crop waste, untreated wood and wood wastes, livestock waste, wastepaper, and organic municipal solid waste.

*[8.]***28.** Renewal—The process by which an operating permit is reissued at the end of its term.

*[9.]***29.** Repair—The restoration of asbestos material that has been damaged. Repair consists of the application of rewettable glass cloth, canvas, cement, or other suitable material. It may also involve filling damaged areas with nonasbestos substitutes and reencapsulating or painting previously-encapsulated materials.

30. Repair coating—A coating used to re-coat portions of a previously-coated product which has sustained mechanical damage to the coating following normal coating operations.

31. Reporting year—The state reporting requirement will coincide with the three (3)-year reporting cycle of the CERR, beginning with 2008. The subsequent reporting years will be every three (3)-years following 2008 (i.e., 2011, 2014, 2017, etc.).

32. Research and development activities—Activities conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically-trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a *de minimis* manner.

33. Research and development emissions unit—Any combustion unit operated only for the purpose of research and development work.

34. Residence time—Period of time in which gas in a thermal oxidizer, incinerator, or afterburner is exposed to heat and oxygen at a specified temperature in order to destroy pollutants present in the gas.

*[10.]***35.** Residual fuel oil—The fuel oil variously known as Bunker C, PS 400, and Number 6 as defined in ASTM D (396–487) (1959).

36. Resist coat—A coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

*[11.]***37.** Responsible official—Includes one (1) of the following:

A. The president, secretary, treasurer, or vice-president of a corporation in charge of a principal business function, any other person who performs similar policy and decision-making functions for the corporation**,** or a duly-authorized representative of this person if the representative is responsible for the overall operation of one (1) or more manufacturing, production, or operating facilities applying for or subject to a permit and either—

(I) The facilities employ more than two hundred fifty (250) persons or have a gross annual sales or expenditures exceeding twenty-five (25) million dollars (in second quarter 1980 dollars); or

(II) The delegation of authority to this representative is approved in advance by the permitting authority;

B. A general partner in a partnership or the proprietor in a sole proprietorship;

C. Either a principal executive officer or ranking elected official in a municipality*[,]* **or** state, federal, or other public agency. For the purpose of this subparagraph, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or

D. The designated representative of an affected source insofar as actions, standards, requirements, or prohibitions under Title IV of the Act or the regulations promulgated under the Act are concerned and the designated representative for any other purposes under part 70.

38. Restricted information—Information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, executive orders, or regulations. Such information includes, but is not limited to, classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information.

*[12.]***39.** Retail outlet—Any establishment where gasoline is sold, offered for sale, or used as a motor vehicle fuel.

40. Rich-burn engine—A two (2)- or four (4)-stroke SI engine where the oxygen content in the exhaust stream before any dilution is one percent (1%) or less measured on a dry basis.

*[13.]***41.** Road-mix—An asphalt course produced by mixing mineral aggregate and cutback or emulsified asphalt at the road site by means of travel plants, motor graders, drags, or special road-mixing equipment.

*[14.]***42.** Roll printing—The application of words, designs, and pictures to a substrate**,** usually by means of a series of hard rubber or steel rolls each with only partial coverage.

*[15.]***43.** Roller spreader—The device used for the application of a coating material to a substrate by means of hard rubber or steel rolls.

44. Rolling lubricant—Petroleum-based oil usually mixed with additives. The lubricant is used to cool the work rolls and provide lubrication for the product in contact with the work rolls.

*[16.]***45.** Rotogravure printing—The application of words, designs, and pictures to a substrate by means of a roll-printing technique which involves an intaglio or recessed image areas in the form of cells.

46. Rubber—Any natural or manmade rubber substrate, including, but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene, and ethylene propylene diene terpolymer.

(S) All terms beginning with "S."

1. Safety-indicating coating—A coating which changes physical characteristics, such as color, to indicate unsafe conditions.

*[1.]***2.** Salvage operation—Any business, trade, industry, or other activity conducted in whole or in part for the purpose of salvaging or reclaiming any product or material.

3. Sealer—A finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Washcoats, which are used in some finishing systems to optimize aesthetics, are not sealers.

*[2.]***4.** Sealing material—A liquid substance that does not contain asbestos which is used to cover a surface that has previously been coated with a friable asbestos-containing material for the intended purpose of preventing any asbestos fibers remaining on the surface from being disbursed into the air. This substance shall be distinguishable from the surface to which it is applied.

5. Secondary chamber—A component of the HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed.

*[3.]***6.** Secondary emissions—The emissions which occur or would occur as a result of the construction or operation of an installation or major modification but do not come from the installation or major modification itself. Secondary emissions must be specific, well-defined, quantifiable, and impact the same general area as the installation or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

A. Emissions from trucks, ships, or trains coming to or from the installation or modification; and

B. Emissions from any off-site support source which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification.

*[4.]***7.** Section 502(b)(10) changes—Changes that contravene an express permit term. These changes do not include those that would violate applicable requirements or contravene federally-enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

8. Self-priming topcoat—A topcoat that is applied directly to a vehicle or component for purposes of corrosion prevention, environmental protection, and function fluid resistance. More than one (1) layer of identical coating formulation may be applied to the vehicle or component.

9. Semi-aqueous cleaning solvent—A solution in which water is a primary ingredient (greater than sixty percent (60%) by weight of the solvent solution as applied must be water).

10. Serial number—When referring to NO_x allowances, the unique identification number assigned to each NO_x allowance by the administrator or director.

*[5.]***11.** Sheet basecoat—The roll coated primary interior surface coating applied to surfaces for the basic protection of buffering filling material from the metal can surface.

12. Sheet-fed—A printing press where individual sheets of substrate are fed into the press sequentially.

13. Sheet rubber lining installation—The process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.

14. Shock-free coating—A coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance and high resistance and having resistance to breaking down under high voltage.

*[6.]***15.** Shutdown—The cessation of operation of any air pollution control equipment or process equipment, excepting the routine phasing out of process equipment. **For the purpose of 10 CSR 10-6.200 only, shutdown is the period of time after all waste has been combusted in the primary chamber. For continuous HMIWI, shutdown shall commence no less than two (2) hours after the last charge to the incinerator. For intermittent HMIWI, shutdown shall commence no less than four (4) hours after the last charge to the incinerator. For batch HMIWI, shutdown shall commence no less than five (5) hours after the high-air phase of combustion has been completed. For the purpose of 10 CSR 10-6.410 only, shutdown is rendering an installation or unit inoperable by physically removing, dismantling, or otherwise disabling the installation or unit so that it could not be reactivated without obtaining a new permit in accordance with 10 CSR 10-6.060.**

*[7.]***16.** Shutdown, permanent—See permanent shutdown.

17. Side-seam coating—A coating applied on the interior and/or exterior of a welded, cemented, or soldered seam to protect the exposed metal.

*[8.]***18.** Significant—A net emissions increase or potential to emit at a rate equal to or exceeding the *de minimis* levels or create an ambient air concentration at a level greater than those listed in 10 CSR 10-6.060(11)(D) Table 4, or any emissions rate or any net emissions increase associated with an installation subject to 10 CSR 10-6.060 which would be constructed within ten kilometers (10 km) of a Class I area and have an air quality impact on the area equal to or greater than one microgram per cubic meter (1 $\mu g/m^3$) (twenty-four (24)-hour average). For purposes of new source review under 10 CSR 10-6.060 sections (7) and (8), net emission increases of hazardous air pollutants exceeding the *de minimis* levels are considered significant only if they are also criteria pollutants.

19. Silicone release coating—A coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces, such as baking pans.

20. Similar source—A stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major source such that the source could be controlled using the same control technology.

21. Single-ply roof membrane—A prefabricated single sheet of rubber, normally ethylene propylene diene terpolymer, that is field applied to a building roof using one (1) layer of membrane material. For the purposes of rule 10 CSR 10-5.330, single-ply roof membrane does not include membranes prefabricated from EPDM.

22. Single-ply membrane adhesive primer—A primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.

23. Single-ply membrane installation and repair adhesive—An adhesive labeled for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, or ducts that protrude through the membrane. Repair includes gluing the edges of torn membrane together, attaching a patch over a hole, and reapplying flashings to vents, pipes, or ducts installed through the membrane.

24. Six (6)-minute period—A three-hundred-sixty (360)-consecutive-second time interval. Six (6)-minute block averages shall be utilized for COMS data per the provisions of Appendix B to 40 CFR 60, Performance Specification 1, promulgated as of July 1, 2007, and hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol

Street NW, Washington, DC 20401. This definition does not incorporate any subsequent amendments or additions.

25. Sludge—Any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

26. Small HMIWI—An HMIWI whose maximum design waste burning capacity is less than or equal to two hundred (200) pounds per hour, or a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to two hundred (200) pounds per hour, or a batch HMIWI whose maximum charge rate is less than or equal to one thousand six hundred (1,600) pounds per day. The following are not small HMIWI: a continuous or intermittent HMIWI whose maximum charge rate is more than two hundred (200) pounds per hour; a batch HMIWI whose maximum charge rate is more than one thousand six hundred (1,600) pounds per day.

*[9.]***27.** Smoke—Small gas-borne particles resulting from combustion, consisting of carbon, ash, and other material.

28. Smoke generating device—A specialized piece of equipment which is not an integral part of a commercial, industrial, or manufacturing process and whose sole purpose is the creation and dispersion of fine solid or liquid particles in a gaseous medium.

29. Soils—Includes, but is not limited to, unwanted grease, wax, grit, ash, dirt, and oil.

30. Solar absorbent coating—A coating which has as its prime purpose the absorption of solar radiation.

31. Solid film lubricant—A very thin coating consisting of a binder system containing as its chief pigment material one (1) or more of the following:

A. Molybdenum;

B. Graphite;

C. Polytetrafluoroethylene (PTFE); and

D. Other solids that act as a dry lubricant between closely- or tightly-fitting surfaces.

32. Solid fuel—A solid material used as a fuel that includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials.

33. Solid waste—Any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)

34. Solids—See coating solids.

35. Solids turnover ratio(R_T) —The ratio of total volume of coating solids that is added to the electrodeposition primer system in a calendar month divided by the total volume design capacity of the electrodeposition primer system.

*[10.]***36.** Solvent—Organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

*[11.]***37.** Solvent metal cleaning—The process of cleaning soils from metal surfaces by cold cleaning or open-top vapor degreasing or conveyorized degreasing.

38. Source—Any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the CAA. For purposes of section 502(c) of the CAA, a "source," including a "source" with multiple units, shall be considered a single "facility."

*[12.]***39.** Source gas volume—The volume of gas arising from a process or other source operation.

*[13.]***40.** Source operation—See emission unit.

41. Specially-constructed vehicle—A motor vehicle that has not been originally constructed under a distinctive name, make, model, or type by a manufacturer of motor vehicles, that has been issued a specially-constructed VIN number from the MDOR, and that has had the specially-constructed VIN installed by the MSHP. The term specially-constructed vehicle includes kit vehicles that are motor vehicles assembled by a person other than a generally-recognized manufacturer of motor vehicles by the use of a glider kit or replica purchased from an authorized manufacturer and accompanied by a manufacturer's statement of origin.

42. Specialty coating—A coating that, even though it meets the definition of a primer, topcoat, or self-priming topcoat, has additional performance criteria beyond those of primers, topcoats, and self-priming topcoats for specific applications. These performance criteria may include, but are not limited to, temperature or fire resistance, substrate compatibility, anti-reflection, temporary protection, or marking, sealing, adhesively-joining substrates, or enhanced corrosion protection.

43. Spray gun cleaner—Equipment used to clean spray guns used to apply, but not limited to, primers, paints, specialty coatings, adhesives, sealers, resins, or deadeners incorporated into a product distributed in commerce.

44. Spray gun soils—Include, but are not limited to, unwanted grease, wax, grit, ash, dirt, oil, unwanted primers, paint, specialty coatings, adhesives, sealers, resins, and deadeners.

*[14.]***45.** Springfield-Greene County area—The geographical area contained within Greene County.

*[15.]***46.** St. Louis metropolitan area—The geographical area comprised of St. Louis, St. Charles, Jefferson, and Franklin Counties and the City of St. Louis.

*[16.]***47.** Stack—Any spatial point in an installation designed to emit air contaminants into ambient air. An accidental opening such as a crack, fissure, or hole is a source of fugitive emissions, not a stack.

*[17.]***48.** Staff director—Director of the Air Pollution Control Program of the Department of Natural Resources.

*[18.]***49.** Stage I vapor recovery system—A system used to capture the gasoline vapors that would otherwise be emitted when gasoline is transferred from a loading installation to a *[delivery vessel]* **cargo tank** or from a *[delivery vessel]* **cargo tank** to a storage tank.

*[19.]***50.** Stage II vapor recovery system—A system used to capture the gasoline vapors that would otherwise be emitted when gasoline is dispensed *[into a vehicle fuel tank by routing vapors back to the fuel storage tank.]* **from a storage tank to the fuel tank of a motor vehicle. For MOPETP, Stage II vapor recovery includes both Stage I and Stage II Vapor Recovery equipment and requirements, unless otherwise stated.**

51. Stain—Any color coat having a solids content by weight of no more than eight percent (8%) that is applied in single or multiple coats directly to the substrate. Includes, but is not limited to, nongrain raising stains, equalizer stains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

*[20.]***52.** Standard conditions—A gas temperature of seventy degrees Fahrenheit (70 °F) and a gas pressure of 14.7 pounds per square inch absolute (psia).

53. Standard metropolitan statistical area or SMSA—Any areas listed in Office of Management and Budget Bulletin No. 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" dated June 30, 1993, and hereby incorporated by reference in this rule, as published by the National Technical Information Services, 5285 Port Royal Road, Springfield, VA 22161. This rule does not incorporate any subsequent amendments or additions.

*[21.]***54.** Start-up—The setting into operation of any air pollution control equipment or process equipment, except the routine phasing in of process equipment. **For the purpose of 10 CSR 10-6.200 only, start-up is the period of time between the activation of the system and the first charge to the unit. For batch HMIWI, start-up means the period of time between activation of the system and ignition of the waste.**

55. Start-up unit—A unit operated only to start up larger electric generating units.

*[22.]***56.** State—Any nonfederal permitting authority, including any local agency, interstate association, or statewide program. When clear from its context, state shall have its conventional territorial definition. **For the purpose of 10 CSR 10-6.360 only, state is one (1) of the forty-eight (48) contiguous states and the District of Columbia specified in 40 CFR 51.121, or any non-federal authority in or including such states or the District of Columbia (including local agencies and statewide agencies) or any eligible Indian tribe in an area of such state or the District of Columbia that adopts a NO_x budget trading program pursuant to 40 CFR 51.121. To the extent a state incorporates by reference the provisions of this part, the term "state" shall mean the incorporating state. The term "state" shall have its conventional meaning where such meaning is clear from the context.**

*[23.]***57.** State implementation plan—A series of plans adopted by the commission, submitted by the director, and approved by the administrator*[,]* detailing methods and procedures to be used in attaining and maintaining the ambient air quality standards in Missouri.

58. State trading program NO_x budget—The total number of tons apportioned to all NO_x budget units in a given state, in accordance with the NO_x budget trading program, for use in a given control period.

59. Stationary internal combustion engine—Internal combustion engine of the reciprocating type that is either attached to a foundation at a facility or is designed to be capable of being carried or moved from one (1) location to another and remains at a single site at a building, structure, facility, or installation for more than twelve (12) consecutive months. Any engine(s) that replace(s) an engine at a site that is intended to perform the same or similar function as the engine replaced is included in calculating the consecutive time period. Nonroad engines and engines used solely for competition are not stationary internal combustion engines.

60. Stationary source—Any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the CAA. Building, structure, facility, or installation includes all pollutant emitting activities that are located on one (1) or more contiguous or adjacent properties and are under the common control of the same person(s).

61. Stencil coating—An ink or a pigmented coating which is applied over a stencil in order to add identifying letters, symbols, and/or numbers.

62. Stoichiometric air/fuel ratio—The air/fuel ratio where all fuel and all oxygen in the air/fuel mixture will be consumed.

63. Stoker boiler—A boiler design that employs a grate assembly to combust coal.

64. Storage container—Vessel or tank, including mix equipment, used to hold finishing, cleaning, or washoff materials.

*[24.]***65.** Storage tank—Any tank, reservoir, or vessel which is a container for liquids or gases, where no manufacturing process or part of it*[,]* takes place.

66. Strippable booth coating—A coating that—

A. Is applied to a booth wall to provide a protective film to receive overspray during finishing operations;

B. That is subsequently peeled off and disposed; and

C. By achieving A. and B. above, reduces or eliminates the need to use organic solvents to clean booth walls.

67. Structural glazing—A process that includes the application of adhesive to bond glass, ceramic, metal, stone, or composite panels to exterior building frames.

68. Subfloor installation—The installation of subflooring material over floor joists, including the construction of any load-bearing joists. Subflooring is covered by a finish surface material.

*[25.]***69.** Submerged fill pipe—Any fill pipe the discharge opening of which is entirely submerged when the liquid level is six inches (6") above the bottom of the tank. Submerged fill pipe when applied to a tank which is loaded from the side is defined as any fill pipe, the discharge opening of which is entirely submerged when the liquid level is eighteen inches (18") or twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.

70. Submerged filling—The filling of a gasoline storage tank through a submerged fill pipe with a discharge no more than six inches (6") (no more than twelve inches (12") for submerged fill pipes installed on or before November 9, 2006) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

71. Submit or serve—To send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation—

A. In person;

B. By United States Postal Service; or

C. By other means of dispatch or transmission and delivery. Compliance with any "submission," "service," or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

72. Substrate—The surface onto which coatings are applied (or into which coatings are impregnated).

73. Sufficient density—Any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance as set forth.

74. Sufficient extraction rate—A rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

75. Surface coating line—Same as a surface coating unit.

76. Surface coating operation—Same as industrial surface coating operation.

77. Surface coating unit—One (1) or more coating applicators and any associated drying area and/or oven wherein a coating is applied, dried, and/or cured. A coating unit ends at the point where the coating is dried or cured, or prior to any subsequent application of a different coating. It is not necessary for a coating unit to have an oven or flash-off area.

*[26.]***78.** Synthesized pharmaceutical manufacturing—Manufacture of pharmaceutical products by chemical synthesis.

79. System—For vapor recovery, a combination of MOPETP-approved (Stage I and Stage II) equipment and components demonstrated to achieve the required efficiencies.

(T) All terms beginning with "T."

1. Tangentially-fired boiler—A boiler that has coal and air nozzles mounted in each corner of the furnace where the vertical furnace walls meet. Both pulverized coal and air are directed from the furnace corners along a line tangential to a circle lying in a horizontal plane of the furnace.

2. Take or start the federal action—The date that the federal agency signs or approves the permit, license, grant, or contract or otherwise physically begins the federal action that requires a conformity evaluation.

3. Temporary boiler—Any gaseous or liquid fuel boiler that is designed to be, and is capable of being, carried or moved from one (1) location to another. A temporary boiler that remains at a location for more than one hundred eighty (180) days during any

three hundred sixty-five (365)-day period is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

*[1.]***4.** Temporary installation—An installation which operates or emits pollutants less than two (2) years.

5. Texture coat—A coating that is applied to a plastic part which, in its finished form, consists of discrete raised spots of the coating.

6. Thin metal laminating adhesive—An adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 millimeters.

7. Tileboard—A premium interior wall paneling product made of hardboard that is used in high-moisture areas of the home, such as kitchens and bathrooms, and meets the specifications for Class I hardboards as approved by the American National Standards Institute.

8. Tire-derived fuel—The end product of a process that converts whole scrap tires into a specific chipped form capable of being used as fuel.

9. Tire repair—A process that includes expanding a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.

*[2.]***10.** Title I modification—Any modification that requires a permit under 10 CSR 10-6.060 section (7) or (8)*[,]* or that is subject to any requirement under 10 CSR 10-6.070 or 10 CSR 10-6.080.

11. Title V operating permit—A permit issued under Title V of the CAA and 40 CFR 70 or 40 CFR 71.

12. Title V operating permit regulations—The regulations that the administrator has approved or issued as meeting the requirements of Title V of the CAA and 40 CFR 70 or 40 CFR 71.

13. Ton or tonnage—Any "short ton" (i.e., two thousand pounds (2,000 lbs)). For the purpose of determining compliance with the NO_x budget emissions limitation, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with applicable requirements, with any remaining fraction of a ton equal to or greater than one-half (0.50) ton deemed to equal one (1) ton and any fraction of a ton less than one-half (0.50) ton deemed to equal zero (0) tons.

*[3.]***14.** Topcoat—The *[surface coatings]* **last film-building finishing material** applied for the purpose of establishing the color or protective surface, or both, including groundcoat and paint sealer materials, base coat, and clear coat. **Nonpermanent final finishes are not topcoats.**

*[4.]***15.** Total fluoride—The elemental fluorine and all fluoride compounds as measured by reference methods specified in 10 CSR 10-6.030(12) or equivalent or alternative methods.

16. Total of direct and indirect emissions—The sum of direct and indirect emissions increases and decreases caused by the federal action; that is, the net emissions considering all direct and indirect emissions. Any emissions decreases used to reduce such total shall have already occurred or shall be enforceable under state and federal law. The portion of emissions which are exempt or presumed to conform under subsection (3)(C), (D), (E), or (F) of 10 CSR 10-6.300 are not included in the "total of direct and indirect emissions," except as provided in subsection (3)(J) of 10 CSR 10-6.300. The "total of direct and indirect emissions" includes emissions of criteria pollutants and emissions of precursors of criteria pollutants. The segmentation of projects for conformity analyses when emissions are reasonably foreseeable is not permitted by this rule.

17. Total organic compounds or "TOC"—Those compounds measured according to the procedures of Method 18 of 40 CFR 60, Appendix A. For the purposes of measuring molar compositions as required in subparagraph (3)(B)3.D. of 10 CSR 10-5.550; hourly emissions rate as required in subparagraph (3)(B)5.D. of 10 CSR 10-5.550 and paragraph (3)(B)2. of 10 CSR 10-5.550; and TOC concentration as required in paragraph (4)(A)4. of 10 CSR 10-5.550. The definition of TOC excluded those compounds that the administrator designates as having negligible photochemical reactivity. The administrator has designated the following organic compounds negligibly reactive: methane; ethane; 1,1,1-trichloroethane; methylene chloride; trichlorofluoromethane; dichlorodifluoromethane; chlorodifluoromethane; trifluoromethane; trichlorotrifluoroethane; dichlorotetrafluoroethane; and chloropentafluoroethane.

18. Total resource effectiveness index value or "TRE index value"—A measure of the supplemental total resource requirement per unit reduction of organic hazardous air pollutants associated with a process vent stream, based on vent stream flow rate, emission rate of volatile organic compound, net heating value, and corrosion properties (whether or not the vent stream contains halogenated compounds) as quantified by the given equations. The TRE index is a decision tool used to determine if the annual cost of controlling a given vent gas stream is acceptable when considering the emissions reduction achieved.

19. Touch-up coating—A coating used to cover minor coating imperfections appearing after the main coating operation.

20. Touch-up and repair operation—That portion of the coating operation that is the incidental application of finishing materials used to cover minor imperfections in the coating finish or to achieve complete coverage. This definition includes out-of-sequence or out-of-cycle coating.

*[5.]***21.** Trade waste—The solid, liquid, or gaseous material resulting from construction or the prosecution of any business, trade, or industry or any demolition operation including, but not limited to, plastics, cardboard cartons, grease, oil, chemicals, or cinders.

22. Traffic coatings—Coatings formulated for and applied to public streets, highways, and other surfaces including, but not limited to, curbs, berms, driveways, and parking lots.

*[6.]***23.** Transfer efficiency (TE)—Ratio of the amount of coating solids transferred onto a product to the total of coating solids used. In any surface coating operation, TE is the ratio of solids in a coating that adhere on a target surface to the total solids used in the process for coating the target surface.

24. Translucent coating—A coating which contains binders and pigment and is formulated to form a colored, but not opaque, film.

25. Treated wood—Wood that has been subjected to a chemical process or application.

26. Tribal implementation plan (TIP)—A plan to implement the national ambient air quality standards adopted and submitted by a federally-recognized Indian tribal government determined to be eligible under 40 CFR 49.9 and the plan has been approved by EPA.

*[7.]***27.** True vapor pressure—The equilibrium partial pressure exerted by a petroleum liquid as determined in American Petroleum Institute Bulletin 2517, *Evaporation Loss from Floating Roof Tanks*, 1962.

28. Type I etchant—A chemical milling etchant that contains varying amounts of dissolved sulfur and does not contain amines.

29. Type II etchant—A chemical milling etchant that is a strong sodium hydroxide solution containing amines.

(U) All terms beginning with "U."

1. Uncombined water—The visible condensed water which is not bound, physically or chemically, to any air contaminant.

2. Unit—A fossil-fuel-fired combustion device **such as a stationary boiler, combustion turbine, or combined cycle system. For the purpose of 10 CSR 10-6.390 only, unit is any diesel, lean-burn, or rich-burn stationary internal combustion engine as defined in this rule**.

3. Unit load—The total (i.e., gross) output of a unit in any control period (or other specified time period) produced by combusting a given heat input of fuel expressed in terms of—

A. The total electrical generation (expressed as megawatt) produced by the unit, including generation for use within the plant; or

B. In the case of a unit that uses heat input for purposes other than electrical generation, the total steam flow (lb/hr) or total steam pressure (psia) produced by the unit, including steam for use by the unit.

4. Unit operating day—A calendar day in which a unit combusts any fuel.

5. Unit operating hour or hour of unit operation—Any hour or fraction of an hour during which a unit combusts fuel.

6. Unit operations—Discrete processing steps that occur within distinct equipment that are used to prepare reactants, facilitate reactions, separate and purify products, and recycle materials.

7. Untreated wood—Lumber and other wooden materials that have not been chemically treated for resistance to moisture, fire, fungi, insects, and other pests, or has not otherwise been treated or manufactured with chemicals, or that does not contain adhesives or resins. Untreated wood does not include plywood, particleboard, chipboard, and wood with other-than-insignificant quantities of paint, coating, or finish.

8. U.S. EPA—The United States Environmental Protection Agency.

9. User source—Any source that seeks to use ERCs to comply with an applicable emission reduction requirement.

10. Utilization—The heat input (expressed in mmBtu/time) for a unit. The unit's total heat input for the control period in each year will be determined in accordance with 40 CFR 75 if the NO_x budget unit was otherwise subject to the requirements of 40 CFR 75 for the year or will be based on the best available data reported to the administrator for the unit if the unit was not otherwise subject to the requirements of 40 CFR 75 for the year.

11. Utilization rate—The amount of an engine's capacity reported in horsepower-hours that is utilized.

(V) All terms beginning with "V."

1. Vacuum-metalizing coating—Topcoats and basecoats that are used in the vacuum-metalizing process.

*[1.]***2.** Vapor recovery system—A vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing the hydrocarbon vapors and gases so as to limit their emission to the atmosphere.

3. Vapor recovery system modification—Any repair, replacement, alteration, or upgrading of Stage I or Stage II vapor recovery control equipment or gasoline dispensing equipment equipped with Stage II vapor recovery beyond normal maintenance of the system as permitted by the staff director.

*[2.]***4.** Vapor tight—When applied to a delivery vessel or vapor recovery system as one that sustains a pressure change of no more than seven hundred fifty (750) pascals (three inches (3") of H_2O) in five (5) minutes when pressurized to a gauge pressure of four thousand five hundred (4,500) pascals (eighteen inches (18") of H_2O) or evacuated to a gauge pressure of one thousand five hundred (1,500) pascals (six inches (6") of H_2O).

*[3.]***5.** Varnish—An unpigmented surface coating containing VOC and composed of resins, oils, thinners, and driers used to give a glossy surface to wood, metal, etc.

*[4.]***6.** Vehicle—Any mechanical device on wheels, designed primarily for use on streets, roads, or highways, except those propelled or drawn by human or animal power or those used exclusively on fixed rails or tracks.

7. Vehicle Inspection Database (VID)—The vehicle inspection database, operated and maintained by the department's contractor. All vehicle emissions inspection information is uploaded by the MDAS inspection equipment to the VID on a real-time basis as soon as each inspection is complete.

8. Vehicle Inspection Report (VIR)—The vehicle inspection report printed by the MDAS inspection equipment at the conclusion of each vehicle's emissions inspection. The VIR is designed solely to provide information regarding the emissions inspection results to motorists and may not be valid for vehicle registration purposes.

9. Vent—A point of emission from a unit operation. Typical process vents from batch processes include condenser vents, vacuum pumps, steam ejectors, and atmospheric vents from reactors and other process vessels. Vents also include relief valve discharges. Equipment exhaust systems that discharge from unit operations also would be considered process vents.

10. Vent stream—Any gas stream discharge directly from a distillation operation or reactor process to the atmosphere or indirectly to the atmosphere after diversion through other process equipment. The vent stream excludes relief valve discharges and equipment leaks including, but not limited to, pumps, compressors, and valves.

*[5.]***11.** Vinyl coating—*[The application of a]* **A functional,** decorative**,** or protective topcoat*[,]* or printing *[or]* **applied to** vinyl-coated fabric or vinyl sheets.

*[6.]***12.** Visible emission—Any discharge of an air contaminant, including condensibles, which reduces the transmission of light or obscures the view of an object in the background.

*[7.]***13.** Volatile organic compounds (VOC)—*[For all areas in Missouri, VOC means a]***A**ny compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions to produce ozone.

A. The following compounds are not considered VOCs because of their known lack of participation in the atmospheric reactions to produce ozone:

CAS #	Compound
138495428	1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee)
431890	1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea)
375031	1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-$C_3F_7OCH_3$ or HFE-7000)
690391	1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
679867	1,1,2,2,3-pentafluoropropane (HFC-245ca)
24270664	1,1,2,3,3-pentafluoropropane (HFC-245ea)
431312	1,1,1,2,3-pentafluoropropane (HFC-245eb)
460731	1,1,1,3,3-pentafluoropropane (HFC-245fa)
431630	1,1,1,2,3,3-hexafluoropropane (HFC-236ea)
406586	1,1,1,3,3-pentafluorobutane (HFC-365mfc)
422560	3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
507551	1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
354234	1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)
1615754	1-chloro-1-fluorethane (HCFC-151a)
163702076	1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$ or HFE-7100)
163702087	2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane (($CF_3)_2CFCF_2OCH_3$)
163702054	1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$ or HFE-7200)
163702065	2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane (($CF_3)_2CFCF_2OC_2H_5$)
297730939	3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500)
71556	1,1,1-trichloroethane (methyl chloroform)
67641	acetone
25497294	1-chloro 1,1-difluoroethane (HCFC-142b)
75456	chlorodifluoromethane (HCFC-22)

593704	chlorofluoromethane (HCFC-31)
76153	chloropentafluoroethane (CFC-115)
63938103	2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
75718	dichlorodifluoromethane (CFC-12)
1717006	1,1-dichloro 1-fluoroethane (HCFC-141b)
1320372	1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114)
34077877	1,1,1-trifluoro 2,2-dichloroethane (HCFC-123)
75376	1,1-difluoroethane (HFC-152a)
75105	difluoromethane (HFC-32)
74840	ethane
353366	ethylfluoride (HFC-161)
74828	methane
79209	methyl acetate
75092	methylene chloride (dichloromethane)
98566	parachlorobenzotrifluoride (PCBTF)
354336	pentafluoroethane (HFC-125)
127184	perchloroethylene (tetrachloroethylene)
359353	1,1,2,2-tetrafluoroethane (HFC-134)
811972	1,1,1,2-tetrafluoroethane (HFC-134a)
75694	trichlorofluoromethane (CFC-11)
26523648	1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
306832	1,1,1-trifluoro 2,2-dichloroethane (HCFC-123)
27987060	1,1,1-trifluoroethane (HFC-143a)
75467	trifluoromethane (HFC-23)
107313	methyl formate ($HCOOCH_3$),
0	1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethylpentane ($C_2F_5CF(OCH_3)CF(CF_3)_2$ or HFE-7300)
108327	propylene carbonate ($C_4H_6O_3$)
616386	dimethyl carbonate ($C_3H_6O_3$)
Perfluorocarbon compounds in the following classes:	
0	Cyclic, branched or linear, completely fluorinated alkanes
0	Cyclic, branched or linear, completely fluorinated ethers with no unsaturations
0	Cyclic, branched or linear, completely methylated siloxanes
0	Cyclic, branched or linear, completely fluorinated tertiary amines with no unsaturations
0	Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine

VOC may be measured by a reference method, an equivalent method, an alternative method, or by procedures specified in either 10 CSR 10-6.030 or 40 CFR 60. These methods and procedures may measure nonreactive compounds, so an owner or operator must exclude these nonreactive compounds when determining compliance.

B. The following compound(s) are considered VOC for purposes of all record keeping, emissions reporting, photochemical dispersion modeling, and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements.

CAS #	Compound
540885	t-butyl acetate

14. Volatile organic liquid—Any substance which is a liquid at storage conditions and which contains one (1) or more volatile organic compounds as defined in this rule.

15. Volatility—For purposes of 10 CSR 10-5.540 only, low volatility materials are defined as those which have a vapor pressure less than or equal to seventy-five (75) mmHg at twenty degrees Celsius (20 °C), moderate volatility materials have a vapor pressure greater than seventy-five (75) and less than or equal to one hundred fifty (150) mmHg at twenty degrees Celsius (20 °C), and high volatility materials have a vapor pressure greater than one hundred fifty (150) mmHg at twenty degrees Celsius (20 °C). To evaluate VOC volatility for single unit operations that service numerous VOCs or for processes handling multiple VOCs, the weighted average volatility can be calculated from knowing the total amount of each VOC used in a year, and the individual component vapor pressure, per the equation in paragraph (1)(E)1. of 10 CSR 10-5.540.

(W) All terms beginning with "W."

1. Wall-fired boiler—A boiler that has pulverized coal burners arranged on the wall of the furnace. The burners have discrete, individual flames that extend perpendicularly into the furnace area.

2. Washcoat—A transparent special-purpose coating having a solids content by weight of twelve percent (12%) or less. They are applied over initial stains to protect and control color and to stiffen the wood fibers in order to aid sanding.

3. Washing—Purifying, cleaning, or removing impurities from coal by mechanical process, regardless of the cleaning medium used.

4. Washoff operations—Those operations in which organic solvent is used to remove coating from a substrate.

*[1.]***5.** Waste generator—The business entity that is directly responsible for the supervision of activities that result in the accumulation of friable asbestos-containing waste materials.

*[2.]***6.** Waxy, heavy pour crude oil—A crude oil with a pour point of fifty degrees Fahrenheit (50 °F) or higher as determined by the ASTM Standard D (97–66), *Test for Pour Point of Petroleum Oils*.

7. Waterproof resorcinol glue—A two (2)-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

8. Web—A printing process where a continuous roll of substrate is fed into the press.

*[3.]***9.** Wet cleaning—The process of using water or other liquid and a wet brush, mop, cloth, sponge, or similar wet cleaning device to completely remove any residue of asbestos-containing materials from surfaces on which they may be located. This definition does not include the use of a wet vacuum cleaner.

10. Wet scrubber—An add-on air pollution control device that utilizes an alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

11. Wood furniture—Any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

12. Wood furniture component—Any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops.

13. Wood furniture manufacturing operations—The finishing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

*[4.]***14.** Work area—A specific room or physically-isolated portion of a room, other than the space enclosed within a glove bag, in which friable asbestos-containing material is required to be handled in accordance with 10 CSR 10-6.240. The area is designated as a work area from the time that the room, or portion of it, is secured and access restrictions are in place. The area remains designated as a work area until the time that it has been cleaned in accordance with any requirements applicable to these operations.

15. Working day—A day, or any part of a day, in which a facility is engaged in manufacturing.

AUTHORITY: sections 643.050 and 643.055, RSMo 2000. Original rule filed Aug. 16, 1977, effective Feb. 11, 1978. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Nov. 30, 2010.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

PROPOSED AMENDMENT

10 CSR 10-6.060 Construction Permits Required. The commission proposes to amend subsections (6)(D) and (8)(A). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule defines sources which are required to obtain permits to construct. It establishes requirements to be met prior to construction or modification of any of these sources. This rule also establishes permit fees and public notice requirements for certain sources and incorporates a means for unifying the processing of construction and operating permit issuance. This amendment incorporates permitting requirements that will cover new construction projects that emit greenhouse gas (GHG) emissions of at least one hundred thousand (100,000) tons per year or modifications at existing facilities that increase GHG emissions by at least seventy-five thousand (75,000) tons per year and clarifies rule text. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is a June 3, 2010, ***Federal Register*** *Notice.*

(6) General Permit Requirements for Construction or Emissions Increase Greater Than *De Minimis* Levels.

(D) Special Considerations for Stack Heights and Dispersion Techniques.

1. The degree of emission limitation required for control of any air pollutant under this rule shall not be affected in any manner by—

A. *[So much]* **That amount** of the stack height of any installation *[as]* **which** exceeds good engineering practice (GEP) stack height; or

B. Any other dispersion technique.

2. Paragraph (6)(D)1. of this rule shall not apply to stack heights on which construction commenced on or before December 31, 1970, or to dispersion techniques implemented on or before December 31, 1970.

3. Before the permitting authority issues a permit under this rule based on stack heights that exceed GEP, the permitting authority must notify the public of the availability of the demonstration study and must provide opportunity for a public hearing on it.

4. This paragraph does not require that actual stack height or the use of any dispersion technique be restricted in any manner.

(8) Attainment and Unclassified Area Permits.

(A) All of the subsections of 40 CFR 52.21, other than (a) Plan disapproval, (q) Public participation, (s) Environmental impact statements, and (u) Delegation of authority, promulgated as of July 1, *[2007, including the revisions published at 72 FR 24078 (effective July 2, 2007) and 72 FR 72617 (effective January 22, 2008),]* **2009, including the revision published at 75 FR 31606-07 (effective August 2, 2010),** are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Dec. 10, 1979, effective April 11, 1980. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Nov. 30, 2010.*

PUBLIC COST: This proposed amendment will cost state agencies or political subdivisions $5,050,000 over the life of the rule. The cost for fiscal year 2013 is estimated to be six hundred thirty-one thousand two hundred fifty dollars ($631,250). Note the attached fiscal note for assumptions that apply.

PRIVATE COST: This proposed amendment will cost private entities $20,200,000 over the life of the rule. The cost for fiscal year 2013 is estimated to be $2,525,000. Note the attached fiscal note for assumptions that apply.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

FISCAL NOTE
PUBLIC COST

I. Department Title: Department of Natural Resources
Division Title: Air Conservation Commission
Chapter Title: Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

Rule Number and Name:	10 CSR 10-6.060 Construction Permits Required
Type of Rulemaking:	Amendment

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Publically owned greenhouse gas sources - Phase 1 - Phase 2 - Continuing Phase 2	 $0 $1,262,500 $3,787,500
Total – ten (10) years	$5,050,000

III. WORKSHEET

Permitting Application

Phase 1 - Sources are already subject to Prevention of Significant Deterioration (PSD) due to their non-Greenhouse Gas (GHG) pollutants
Zero (0) PSD permits x $84,500 application = $0

Phase 2 - Sources subject to PSD due to their GHG pollutants
One (1) PSD permit x $84,500 application = $84,500

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants
One (1) PSD permit every 2 years x $84,500 application = $84,500 x three (one every other year for six years) = $253,500

Summary of Permitting Application Worksheet Costs

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	$0	-	-
Phase 2	-	$84,500	-

Continuing Phase 2	-	-	$253,500

GHG Emission Reduction Measures

Phase 1 - Sources are already subject to PSD due to their non-GHG pollutants
Zero (0) sources = $0

Phase 2 - Sources subject to PSD due to their GHG pollutants
One (1) PSD source

Replace/upgrade burners	$ 75,000
Tuning	$ 3,000
Optimization	$ 100,000
Instrumentation and controls	$1,000,000
Total	$1,178,000

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants
One (1) PSD source every 2 years x $1,178,000 = $1,178,000 x three (one every other year for six years) = $3,534,000

Summary of GHG Emission Reduction Measures

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	$0	-	-
Phase 2	-	$1,178,000	-
Continuing Phase 2	-	-	$3,534,000

Summary of Combined Permitting Application and Emission Reduction Measures

	Phase 1	Phase 2	Continuing Phase 2
Permitting	$0	$84,500	$253,500
Reduction Measures	$0	$1,178,000	$3,534,000
Total	$0	$1,262,500	$3,787,500
Total – All Phases	$5,050,000		

Fiscal Year 2012	$631,250
Fiscal Year 2013	$631,250
Fiscal Year 2014	$631,250
Fiscal Year 2015	$631,250
Fiscal Year 2016	$631,250
Fiscal Year 2017	$631,250
Fiscal Year 2018	$631,250
Fiscal Year 2019	$631,250

IV. ASSUMPTIONS

1. During the first phase of the rule, PSD requirements will apply to sources' GHG emissions only if such sources are already subject to PSD due to their non-GHG pollutants. Based on information from previous years, it is estimated that two (2) PSD construction permits will be affected during Phase 1 of the program which runs from January 2, 2011 – June 30, 2011. For this fiscal note, we assume neither of these two (2) sources will be publically owned. Phase 1 occurs prior to the effective date of this rule so there is no cost.

2. During the second phase of the rule additional large sources of GHG emissions with the potential to emit at least 100,000 tons per year of CO2 equivalent will become subject to PSD requirements. For Phase 2 of the program, which runs from July 1, 2011 – June 30, 2013, it is estimated that five (5) PSD construction permits will be affected. For this fiscal note, we assume that only one (1) of those sources will be publically owned. The Environmental Protection Agency (EPA) estimates that nationwide, sources that undergo PSD permitting actions will spend an average cost ranging from $59,000 to $84,500 to prepare the application and receive the permit. The range in cost is due to whether the source is considered an industrial source or a commercial/residential source. In generating the fiscal impact, since we have no way of knowing what type of source it will be, the more conservative (higher) cost was used.

3. EPA commits to undertake another rulemaking, to begin in 2011 and conclude no later than July 1, 2012, that will outline an additional step for phasing in GHG permitting (Phase 3) to review permitting for smaller GHG emission sources. EPA will not require permits for smaller sources in Phase 3 or through any other action until at least April 30, 2016. Since there are no details on Phase 3 that could be used in estimating the fiscal impact, for purposes of this fiscal note, we continue Phase 2 into the future as it currently stands using the assumptions from Phase 2. Since the one (1) source in Phase 2 is over a two (2) year period, we use half a source per year or one (1) source every two (2) years in continuing Phase 2.

4. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be ten (10) years beginning with Phase 2 although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.

5. The actual costs to sources to install Best Available Control Technology (BACT) controls, while uncertain at this point, would likely add additional costs. In most cases for GHGs, this BACT process should lead to implementing energy efficiency measures, which generally cost less than add on emission controls and can result in cost savings. For the purpose of this fiscal note, we assume a hypothetical industrial, commercial, and industrial (ICI) boiler source is required to reduce GHG emissions. A facility having an ICI boiler is the most common type of source as indicated by

EPA. The emission reduction measures and their costs come from EPA's white paper Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from Industrial, Commercial, and Institutional Boilers, October 2010. The source has a 30 million BTU boiler and will implement the following GHG emission reduction measures: replace/upgrade burners at a cost of $2,500 per million BTU, combustion system tuning at a cost of $3,000, combustion and boiler performance optimization at a cost of $100,000, and upgrade instrumentation and controls at a cost of $1,000,000. The costs over the first ten (10) years uses the same assumptions as found in assumptions 1-4 listed above.

FISCAL NOTE
PRIVATE COST

V. Department Title: Department of Natural Resources
Division Title: Air Conservation Commission
Chapter Title: Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

Rule Number and Title:	10 CSR 10-6.060 Construction Permits Required
Type of Rulemaking:	Amendment

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Phase 1 – two (2) entities	Sources are already subject to Prevention of Significant Deterioration (PSD) or title V due to their non-Greenhouse Gas (GHG) pollutants	$0
Phase 2 – four (4) entities	Sources subject to PSD or title V due to their GHG pollutants	$5,050,000
Continuing Phase 2 – two (2) entities per year	Sources subject to PSD or title V due to their GHG pollutants	$15,150,000
Total – ten (10) years		$20,200,000

III. WORKSHEET

Permitting Application

Phase 1 - Sources are already subject to PSD due to their non-GHG pollutants
Two (2) PSD permits x $0 application = $0

Phase 2 - Sources subject to PSD due to their GHG pollutants
Four (4) PSD permits x $84,500 application = $338,000

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants
Two (2) PSD permits per year x $84,500 application = $169,000 x six (6) years = $1,014,000

Summary of Permitting Application Worksheet Costs

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	$0	-	-
Phase 2	-	$338,000	-
Continuing Phase 2	-	-	$1,014,000

GHG Emission Reduction Measures

Phase 1 - Sources are already subject to PSD due to their non-GHG pollutants
Zero (0) sources = $0

Phase 2 - Sources subject to PSD due to their GHG pollutants
Four (4) PSD sources

	1 source	4 sources
Replace/upgrade burners	$ 75,000	$ 300,000
Tuning	$ 3,000	$ 12,000
Optimization	$ 100,000	$ 400,000
Instrumentation and controls	$1,000,000	$4,000,000
Total	$1,178,000	$4,712,000

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants
Two (2) PSD sources per year x $1,178,000 = $2,356,000 x six years = $14,136,000

Summary of GHG Emission Reduction Measures

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	$0	-	-
Phase 2	-	$4,712,000	-
Continuing Phase 2	-	-	$14,136,000

Summary of Combined Permitting Application and Emission Reduction Measures

	Phase 1	Phase 2	Continuing Phase 2
Permitting	$0	$338,000	$1,014,000
Reduction Measures	$0	$4,712,000	$14,136,000
Total	$0	$5,050,000	$15,150,000
Total – All Phases	$20,200,000		

Fiscal Year 2012	$2,525,000
Fiscal Year 2013	$2,525,000
Fiscal Year 2014	$2,525,000
Fiscal Year 2015	$2,525,000
Fiscal Year 2016	$2,525,000
Fiscal Year 2017	$2,525,000
Fiscal Year 2018	$2,525,000
Fiscal Year 2019	$2,525,000

VI. ASSUMPTIONS

1. During the first phase of the rule, PSD requirements will apply to sources' GHG emissions only if such sources are already subject to PSD due to their non-GHG pollutants. Based on information from previous years, it is estimated that two (2) PSD construction permits will be affected during Phase 1 of the program which runs from January 2, 2011 – June 30, 2011. For this fiscal note, we assume that those two (2) sources will be privately owned. Phase 1 occurs prior to the effective date of this rule so there is no cost.

2. During the second phase of the rule additional large sources of GHG emissions with the potential to emit at least 100,000 tons per year of CO2 equivalent will become subject to PSD and title V requirements. For Phase 2 of the program, which runs from July 1, 2011 – June 30, 2013, it is estimated that five (5) PSD construction permits will be affected. For this fiscal note, we assume that four (4) of those sources will be privately owned. The Environmental Protection Agency (EPA) estimates that nationwide, sources that undergo PSD permitting actions will spend an average cost ranging from $59,000 to $84,500 to prepare the application and receive the permit. The range in cost is due to whether the source is considered an industrial source or a commercial/residential source. In generating the fiscal impact, since we have no way of knowing what type of source it will be, the more conservative (higher) cost was used.

3. EPA commits to undertake another rulemaking, to begin in 2011 and conclude no later than July 1, 2012, that will outline an additional step for phasing in GHG permitting (Phase 3) to review permitting for smaller GHG emission sources. EPA will not require permits for smaller sources in Phase 3 or through any other action until at least April 30, 2016. Since there are no details on Phase 3 that could be used in estimating the fiscal impact, for purposes of this fiscal note, we continue Phase 2 into the future as it currently stands using the assumptions from Phase 2. Since the four (4) sources in Phase 2 is over a two (2) year period, we use two (2) sources per year in continuing Phase 2.

4. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be ten (10) years beginning with Phase 2 although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the

annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.

5. The actual costs to sources to install Best Available Control Technology (BACT) controls, while uncertain at this point, would likely add additional costs. In most cases for GHGs, this BACT process should lead to implementing energy efficiency measures, which generally cost less than add on emission controls and can result in cost savings. For the purpose of this fiscal note, we assume a hypothetical industrial, commercial, and industrial (ICI) boiler source is required to reduce GHG emissions. A facility having an ICI boiler is the most common type of source as indicated by EPA. The emission reduction measures and their costs come from EPA's white paper Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from Industrial, Commercial, and Institutional Boilers, October 2010. The source has a 30 million BTU boiler and will implement the following GHG emission reduction measures: replace/upgrade burners at a cost of $2,500 per million BTU, combustion system tuning at a cost of $3,000, combustion and boiler performance optimization at a cost of $100,000, and upgrade instrumentation and controls at a cost of $1,000,000. The costs over the first ten (10) years uses the same assumptions as found in assumptions 1-4 listed above.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

PROPOSED AMENDMENT

10 CSR 10-6.065 Operating Permits. The commission proposes to amend section (2) and subsection (7)(A). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule defines air contaminant sources which are required to obtain operating permits and establishes procedures for obtaining and complying with operating permits; it does not establish any air quality standards or guidelines. This amendment incorporates permitting requirements that will cover new construction projects that emit greenhouse gas (GHG) emissions of at least one hundred thousand (100,000) tons per year or modifications at existing facilities that increase GHG emissions by at least seventy-five thousand (75,000) tons per year, removes definitions that will now be found in regulation 10 CSR 10-6.020, and streamlines the public notice procedure to align with the ***Federal Register*** *and allow the flexibility to publish notices on the web. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is a June 3, 2010,* ***Federal Register*** *Notice.*

(2) Definitions.

[(A) Air Pollutant—Agent, or combination of agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the staff director has identified such precursor(s) for the particular purpose for which the term "air pollutant" is used.

(B) Basic state installations—Installations which meet any of the following criteria, but are not part 70 installations:

1. Emit or have the potential to emit any air pollutant in an amount greater than the de minimis levels. The fugitive emissions of an installation shall not be considered unless the installation belongs to one of the source categories listed in to 10 CSR 10-6.020(3)(B), Table 2; or

2. Either of the following criteria, provided the U.S. EPA administrator has deferred a decision on whether the installation would be subject to part 70:

A. Are subject to a standard, limitation or other requirement under section 111 of the Act, including area sources subject to a standard, limitation or other requirement under section 111 of the Act; or

B. Are subject to a standard or other requirement under section 112 of the Act, except that a source is not required to obtain a permit solely because it is subject to rules or requirements under section 112(r) of the Act, including area sources subject to a standard or other requirement under section 112 of the Act, except that an area source is not required to obtain a permit solely because it is subject to regulations or requirements under section 112(r) of the Act.

(C) Intermediate installations are part 70 installations that become basic state installations based on their potential to emit by accepting the imposition of voluntarily agreed to federally-enforceable limitations on the type of materials combusted or processed, operating rates, hours of operation, or emission rates more stringent than those otherwise required by rule or regulation.]

*[(D)]***(A)** Part 70 installations—Installations to which the part 70 operating permit requirements of this rule apply, in accordance with the following criteria:

1. They emit or have the potential to emit, in the aggregate, ten (10) tons per year (tpy) or more of any hazardous air pollutant, other than radionuclides, or twenty-five (25) tpy or more of any combination of these hazardous air pollutants or such lesser quantity as the administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not these units are in a contiguous area or under common control, to determine whether these units or stations are subject installations. For sources of radionuclides, the criteria shall be established by the administrator;

2. They emit or have the potential to emit one hundred (100) tpy or more of any air pollutant **subject to regulation**, including all fugitive air pollutants. The fugitive emissions of an installation shall not be considered unless the installation belongs to one **(1)** of the source categories listed in 10 CSR 10-6.020(3)(B), Table 2**. Subject to regulation means, for any air pollutant, that the pollutant is subject to either a provision in the Clean Air Act or a nationally-applicable regulation codified by the administrator in 40 CFR Parts 50-99, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit, or restrict the quantity of emissions of that pollutant released from the regulated activity, except that—**

A. Greenhouse gases (GHGs), the air pollutant defined as the aggregate group of six (6) greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation unless, as of July 1, 2011, the GHG emissions are at a stationary source emitting or having the potential to emit one hundred thousand (100,000) tpy carbon dioxide (CO_2) equivalent emissions; and

B. The term tpy CO_2 equivalent emissions (CO_2e) shall represent an amount of GHGs emitted and shall be computed by multiplying the mass amount of emissions (tpy), for each of the six (6) greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to subpart A of 40 CFR Part 98, promulgated as of October 30, 2009, and summing the resultant value for each to compute a tpy CO_2e. Table A-1 is hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions;

3. They are located in nonattainment areas or ozone transport regions.

A. For ozone nonattainment areas, sources with the potential to emit one hundred (100) tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," fifty (50) tpy or more in areas classified as "serious," twenty-five (25) tpy or more in areas classified as "severe," and ten (10) tpy or more in areas classified as "extreme"; except that the references in this paragraph to one hundred (100), fifty (50), twenty-five (25)**,** and ten (10) tpy of nitrogen oxides shall not apply with respect to any source for which the administrator has made a finding, under section 182(f)(1) or (2) of the Act, that requirements under section 182(f) of the Act do not apply;

B. For ozone transport regions established pursuant to section 184 of the Act, sources with the potential to emit fifty (50) tpy or more of volatile organic compounds;

C. For carbon monoxide nonattainment areas that are classified as "serious," and in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the administrator, sources with the potential to emit fifty (50) tpy or more of carbon monoxide; and

D. For particulate matter less than ten (10) micrometers (PM_{10}) nonattainment areas classified as "serious," sources with the potential to emit seventy (70) tpy or more of PM_{10};

4. They are affected sources under Title IV of the 1990 Act;

5. They are solid waste incinerators subject to section 129(e) of the Act;

6. Any installation in a source category designated by the administrator as a part 70 source pursuant to 40 CFR 70.3; and

7. Installations that would be part 70 sources strictly due to the following criteria are not subject to part 70 source requirements until the administrator subjects this installation to these requirements by rule:

A. They are subject to a standard, limitation**,** or other requirement under section 111 of the Act, including area sources; or

B. They are subject to a standard or other requirement under section 112 of the Act, except that a source, including an area source, is not required to obtain a permit solely because it is subject to rules or requirements under section 112(r) of the Act.

*[(E)]***(B)** Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(7) Public Participation. Except for proposed modifications qualifying for the minor permit modification procedures, all permit proceedings, including initial permit issuance, significant permit modifications**,** and permit renewals, shall be conducted in accordance with the procedures for public participation in this section (7).

(A) Drafts for Public Comment and Public Notice. After receipt of an application for a permit, significant permit modification**,** or permit renewal**,** and no later than sixty (60) days before the deadline for issuance of a permit, significant permit modification**,** or permit renewal for the administrator's review, the permitting authority shall issue a draft permit and solicit comment from the applicant, affected states**,** and the public as follows:

1. The permitting authority shall provide notice to the public by—

A. Making available in at least one (1) location in the area in which the installation is located a public file containing copies of all materials that the applicant has submitted other than those granted confidential treatment, copies of the preliminary determination and draft permit, modified permit or permit renewal, and a copy or summary of other materials, if any, considered in making the preliminary permit determination; **or**

B. **State publication or web site designed to give general public notice details of the proposed action or** *[P]***p**ublishing*[, by advertisement]* in at least one (1) newspaper of general circulation in the area in which the installation is located, a notice of the application, the preliminary permit determination, the location of the public file, the procedures for submitting written comments and for requesting a public hearing, and the date, time**,** and location for a public hearing if one is to be held.

2. Copies of the notice required shall be sent to the applicant and to the representatives of affected states designated by those states to receive the notices.

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Sept. 2, 1993, effective May 9, 1994. For intervening history, please consult the ***Code of State Regulations****. Amended: Filed Nov. 30, 2010.*

PUBLIC COST: This proposed amendment will cost state agencies or political subdivisions $4,500,800 over the life of the rule. The cost for fiscal year 2013 is estimated to be five hundred eighty thousand dollars ($580,000). Note the attached fiscal note for assumptions that apply.

PRIVATE COST: This proposed amendment will cost private entities $41,620,000 over the life of the rule. The cost for fiscal year 2013 is estimated to be $5,220,000. Note the attached fiscal note for assumptions that apply.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

FISCAL NOTE
PUBLIC COST

I. Department Title: Department of Natural Resources
Division Title: Air Conservation Commission
Chapter Title: Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

Rule Number and Name:	10 CSR 10-6.065 Operating Permits
Type of Rulemaking:	Amendment

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Publically owned greenhouse gas sources - Phase 1 - Phase 2 - Continuing Phase 2	 $0 $1,160,000 $3,340,800
Total – ten (10) years	$4,500,800

III. WORKSHEET

Phase 1 - Sources are already subject to title V due to their non-Greenhouse Gas (GHG) pollutants
Five (5) already required to obtain operating permits x $0 = $0

Phase 2 - Sources subject to title V due to their GHG pollutants
Twenty-five (25) title V operating permits x $46,400 application = $1,160,000

Continuing Phase 2 - Sources subject to title V due to their GHG pollutants
Twelve (12) title V operating permits per year x $46,400 application = $556,800 x six (6) years = $3,340,800

Summary of Permitting Application Worksheet Costs

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	$0	-	-
Phase 2	-	$1,160,000	-
Continuing Phase 2	-	-	$3,340,800
Total – All Phases	$4,500,800		

Fiscal Year 2012	$580,000
Fiscal Year 2013	$580,000
Fiscal Year 2014	$556,800
Fiscal Year 2015	$556,800
Fiscal Year 2016	$556,800
Fiscal Year 2017	$556,800
Fiscal Year 2018	$556,800
Fiscal Year 2019	$556,800

VII. ASSUMPTIONS

1. During the first phase of the rule title V requirements will apply to sources' GHG emissions only if such sources are already subject to title V due to their non-GHG pollutants. Based on information from previous years, it is estimated that eighty (80) operating permits will be affected during Phase 1 of the program which runs from January 2, 2011 – June 30, 2011. For this fiscal note, we assume that five (5) sources will be publically owned. Title V operating permits do not contain new requirements; the source will address GHG emissions by listing applicable requirements for GHG emissions. Currently, unless a source goes through PSD permitting for GHG emissions in this time frame, the only applicable requirement for GHG emissions is the federal Greenhouse Gas Reporting Rule. Adding the listing of the federal Greenhouse Gas Reporting Rule is not expected to cost the source any additional money. Phase 1 occurs prior to the effective date of this rule so there is no cost.

2. During the second phase of the rule additional large sources of GHG emissions with the potential to emit at least 100,000 tons per year of CO2 equivalent will become subject to title V requirements. For Phase 2 of the program, which runs from July 1, 2011 – June 30, 2013, it is estimated that two hundred fifty (250) operating permits will be affected. For this fiscal note, we assume that twenty-five (25) sources will be publically owned. The Environmental Protection Agency (EPA) estimates that nationwide, sources that would need title V operating permits will spend an average cost ranging from $23,200 to $46,400 to prepare the application and receive the permit. The range in cost is due to whether the source is considered an industrial source or a commercial/residential source. In generating the fiscal impact, since we have no way of knowing what type of source it will be, the more conservative (higher) cost was used.

3. EPA commits to undertake another rulemaking, to begin in 2011 and conclude no later than July 1, 2012, that will outline an additional step for phasing in GHG permitting (Phase 3) to review permitting for smaller GHG emission sources. EPA will not require permits for smaller sources in Phase 3 or through any other action until at least April 30, 2016. Since there are no details on Phase 3 that could be used in estimating the fiscal impact, for purposes of this fiscal note, we continue Phase 2 into the future as it currently stands using the assumptions from Phase 2. Since the

twenty-five (25) sources in Phase 2 is over a two (2) year period, we use twelve (12) sources per year in continuing Phase 2.

4. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be ten (10) years beginning with Phase 2 although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.

FISCAL NOTE
PRIVATE COST

VIII. Department Title: Department of Natural Resources
Division Title: Air Conservation Commission
Chapter Title: Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

Rule Number and Title:	10 CSR 10-6.065 Operating Permits
Type of Rulemaking:	Amendment

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Phase 1 – seventy-five (75) entities	Sources are already subject to Prevention of Significant Deterioration (PSD) or title V due to their non-Greenhouse Gas (GHG) pollutants	$0
Phase 2 – two hundred twenty-five (225) entities	Sources subject to PSD or title V due to their GHG pollutants	$10,440,000
Continuing Phase 2 – one hundred twelve (112) per year	Sources subject to PSD or title V due to their GHG pollutants	$31,180,000
Total – ten (10) years		$41,620,000

III. WORKSHEET

Phase 1 - Sources are already subject to PSD due to their non-GHG pollutants
Seventy-five (75) already required to obtain operating permits x $0 = $0

Phase 2 - Sources subject to PSD due to their GHG pollutants
Two hundred twenty-five (225) title V operating permits x $46,400 application = $10,440,000

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants
One hundred twelve (112) per year title V operating permits x $46,400 application = $5,196,800 x six (6) years = $31,180,800

Summary of Permitting Application Worksheet Costs

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	$0	-	-
Phase 2	-	$10,440,000	-
Continuing Phase 2	-	-	$31,180,000
Total – All Phases	$41,620,000		

Fiscal Year 2012	$5,220,000
Fiscal Year 2013	$5,220,000
Fiscal Year 2014	$5,196,667
Fiscal Year 2015	$5,196,667
Fiscal Year 2016	$5,196,667
Fiscal Year 2017	$5,196,667
Fiscal Year 2018	$5,196,667
Fiscal Year 2019	$5,196,667

IX. ASSUMPTIONS

1. During the first phase of the rule title V requirements will apply to sources' GHG emissions only if such sources are already subject to title V due to their non-GHG pollutants. Based on information from previous years, it is estimated that eighty (80) operating permits will be affected during Phase 1 of the program which runs from January 2, 2011 – June 30, 2011. For this fiscal note, we assume that seventy-five (75) sources will be privately owned. Title V operating permits do not contain new requirements; the source will address GHG emissions by listing applicable requirements for GHG emissions. Currently, unless a source goes through PSD permitting for GHG emissions in this time frame, the only applicable requirement for GHG emissions is the federal Greenhouse Gas Reporting Rule. Adding the listing of the federal Greenhouse Gas Reporting Rule is not expected to cost the source any additional money. Phase 1 occurs prior to the effective date of this rule so there is no cost.

2. During the second phase of the rule additional large sources of GHG emissions with the potential to emit at least 100,000 tons per year of CO2 equivalent will become subject to title V requirements. For Phase 2 of the program, which runs from July 1, 2011 – June 30, 2013, it is estimated that two hundred fifty (250) operating permits will be affected. For this fiscal note, we assume that two hundred twenty-five (225) sources will be privately owned. The Environmental Protection Agency (EPA) estimates that nationwide, sources that would need title V operating permits will spend an average cost ranging from $23,200 to $46,400 to prepare the application and receive the permit. The range in cost is due to whether the source is considered an

industrial source or a commercial/residential source. In generating the fiscal impact, since we have no way of knowing what type of source it will be, the more conservative (higher) cost was used.

3. EPA commits to undertake another rulemaking, to begin in 2011 and conclude no later than July 1, 2012, that will outline an additional step for phasing in GHG permitting (Phase 3) to review permitting for smaller GHG emission sources. EPA will not require permits for smaller sources in Phase 3 or through any other action until at least April 30, 2016. Since there are no details on Phase 3 that could be used in estimating the fiscal impact, for purposes of this fiscal note, we continue Phase 2 into the future as it currently stands using the assumptions from Phase 2. Since the two hundred twenty-five (225) sources in Phase 2 is over a two (2) year period, we use one hundred twelve (112) sources per year in continuing Phase 2.

4. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be ten (10) years beginning with Phase 2 although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

PROPOSED AMENDMENT

10 CSR 10-6.200 Hospital, Medical, Infectious Waste Incinerators. The commission proposes to amend subsections (1)(A), (1)(H), (1)(I), (4)(A)–(4)(C), and (4)(F) and sections (2), (3), and (5). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule establishes emission limits for existing hospital, medical, and infectious waste incinerators. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the ***Federal Register*** *Notice dated October 6, 2009, regarding Hospital, Medical, Infectious Waste Incinerators.*

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) Applicability.

(A) Except as provided in subsection (1)(B) through (H) of this rule, this rule applies to each individual hospital or medical/infectious waste incinerator (HMIWI) *[for which construction was commenced on or before June 20, 1996.]*—

1. For which construction was commenced after June 20, 1996, but no later than December 1, 2008; or

2. For which modification is commenced after March 16, 1998, but no later than April 6, 2010.

(H) Physical or operational changes made to an *[existing]* HMIWI unit solely for the purpose of complying with this rule are not considered a modification and do not result in an *[existing]* HMIWI unit becoming subject to the provisions of 40 CFR part 60 subpart Ec.

(I) *[Beginning September 15, 2000, designated facilities]* **Facilities** subject to this rule shall operate pursuant to a permit issued under the permitting authorities operating permit program.

(2) Definitions.

[(A) Batch HMIWI means an HMIWI that is designed such that neither waste charging nor ash removal can occur during combustion.

(B) Biologicals means preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

(C) Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

(D) Chemotherapeutic waste means waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

(E) Co-fired combustor means a unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, ten percent (10%) or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar-quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other wastes" when calculating the percentage of hospital waste and medical/infectious waste combusted.

(F) Continuous HMIWI means an HMIWI that is designed to allow waste charging and ash removal during combustion.

(G) Department means the Department of Natural Resources.

(H) Dioxins/furans means the combined emission of tetra- through octa-chlorinated dibenzo-para-dioxins and dibenzofurans.

(I) Director means the director of the Department of Natural Resources.

(J) Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gases in the HMIWI exhaust stream forming a dry powder material.

(K) Hospital means any facility which has an organized medical staff, maintains at least six (6) inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of twenty-four (24) hours per admissions. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision.

(L) Hospital/medical/infectious waste incinerator or HMIWI or HMIWI unit means any device that combusts any amount of hospital waste and/or medical/infectious waste.

(M) Hospital waste means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

(N) Intermittent HMIWI means an HMIWI that is designed to allow waste charging, but not ash removal, during combustion.

(O) Large HMIWI means an HMIWI whose maximum design waste burning capacity is more than five hundred (500) pounds per hour, or a continuous or intermittent HMIWI whose maximum charge rate is more than five hundred (500) pounds per hour, or a batch HMIWI whose maximum charge rate is more than four thousand (4,000) pounds per day.

(P) Low-level radioactive waste means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or state standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

(Q) Maximum charge rate means for continuous and intermittent HMIWI, one hundred ten percent (110%) of the lowest three (3)-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits or for batch HMIWI, one

hundred ten percent (110%) of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

(R) Maximum fabric filter inlet temperature means one hundred ten percent (110%) of the lowest three (3)-hour average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

(S) Maximum flue gas temperature means one hundred ten percent (110%) of the lowest three (3)-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the mercury (Hg) emission limit.

(T) Medical/infectious waste means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed in paragraphs (2)(T)1. through (2)(T)7. below. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR part 261; household waste, as defined in 40 CFR part 261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in 40 CFR part 261.4(a)(1).

1. Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

2. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.

3. Human blood and blood products including:

A. Liquid waste human blood;

B. Products of blood;

C. Items saturated and/or dripping with human blood; and

D. Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category.

4. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

5. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals.

6. Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases.

7. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

(U) Medium HMIWI means an HMIWI whose maximum design waste burning capacity is more than two hundred (200) pounds per hour but less than or equal to five hundred (500) pounds per hour, or a continuous or intermittent HMIWI whose maximum charge rate is more than two hundred (200) pounds per hour but less than or equal to five hundred (500) pounds per hour, or a batch HMIWI whose maximum charge rate is more than one thousand six hundred (1,600) pounds per day but less than or equal to four thousand (4,000) pounds per day.

(V) Minimum dioxin/furan sorbent flow rate means ninety percent (90%) of the highest three (3)-hour average dioxin/furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

(W) Minimum Hg sorbent flow rate means ninety percent (90%) of the highest three (3)-hour average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the Hg emission limit.

(X) Minimum hydrogen chloride (HCl) sorbent flow rate means ninety percent (90%) of the highest three (3)-hour average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

(Y) Minimum horsepower or amperage means ninety percent (90%) of the highest three (3)-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limit.

(Z) Minimum pressure drop across the wet scrubber means ninety percent (90%) of the highest three (3)-hour average pressure drop across the wet scrubber particulate matter (PM) control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM emission limit.

(AA) Minimum scrubber liquor flow rate means ninety percent (90%) of the highest three (3)-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits.

(BB) Minimum scrubber liquor pH means ninety percent (90%) of the highest three (3)-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all HCl emission limits.

(CC) Minimum secondary chamber temperature means ninety percent (90%) of the highest three (3)-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, carbon monoxide (CO), or dioxin/furan emission limits.

(DD) Pathological waste means waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable).

(EE) Pyrolysis means the endothermic gasification of hospital waste and/or medical/infectious waste using external energy.

(FF) Small HMIWI means an HMIWI whose maximum design waste burning capacity is less than or equal to two hundred (200) pounds per hour, or a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to two hundred (200) pounds per hour, or a batch HMIWI whose maximum charge rate is less than or equal to one thousand six hundred (1,600) pounds per day.

(GG) Standard Metropolitan Statistical Area or SMSA means any areas listed in Office of Management and Budget Bulletin No. 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" date June 30, 1993 (incorporated by reference).

(HH) Wet scrubber means an add-on air pollution control device that utilizes an alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.]

(A) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in the Clean Air Act and in 40 CFR Part 60, subparts A, B, and Ec.

(B) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

(A) Emission Limits.

1. *[On or after the date on which the initial performance test is completed or September 1, 2000, whichever date comes first, no]* **No** owner or operator of an *[existing]* HMIWI **subject to this rule** shall cause to be discharged into the atmosphere *[from that HMIWI]* any gases that contain stack emissions in excess of the limits presented in Table 1 of this subsection, except as provided for in paragraph (3)(A)2. of this rule.

[TABLE 1. EMISSION LIMITS FOR SMALL, MEDIUM, AND LARGE HMIWI

Pollutant	Units (7 percent oxygen, dry basis)	Emission limits HMIWI size		
		Small	Medium	Large
Particulate matter	milligrams per dry standard cubic meter (grains per dry standard cubic foot)	115 (0.05)	69 (0.03)	34 (0.015)
Carbon monoxide	parts per million by volume	40	40	40
Dioxins/furans	nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	125 (55) 2.3 (1.0)	125 (55) 2.3 (1.0)	125 (55) 2.3 (1.0)
Hydrogen chloride	parts per million by volume or percent reduction	100 or 93 %	100 or 93 %	100 or 93 %
Sulfur dioxide	parts per million by volume	55	55	55
Nitrogen oxides	parts per million by volume	250	250	250
Lead	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	1.2 (0.52) or 70 %	1.2 (0.52) or 70 %	1.2 (0.52) or 70 %
Cadmium	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.16 (0.07) or 65 %	0.16 (0.07) or 65 %	0.16 (0.07) or 65 %
Mercury	milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.55 (0.24) or 85 %	0.55 (0.24) or 85 %	0.55 (0.24) or 85 %]

Table 1—Emissions Limits for Small, Medium, and Large HMIWI

Pollutant	Units (7 percent oxygen, dry basis)	Emissions limits HMIWI size			Averaging time[1]	Method for demonstrating compliance[2]
		Small	Medium	Large		
Particulate matter	Milligrams per dry standard cubic meter (mg/dscm) (grains per dry standard cubic foot (gr/dscf))	66 (0.029)	46 (0.020) or 34 (.015)[3]	25 (0.011)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 5 of Appendix A–3 of part 60 or EPA Reference Method 26A or 29 of Appendix A–8 of part 60.
Carbon monoxide	Parts per million by volume (ppmv)	20	5.5	11	3-run average (1-hour minimum sample time per run)	EPA Reference Method 10 or 10B of Appendix A–4 of part 60.
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (ng/dscm) (grains per billion dry standard cubic feet ($gr/10^9$dscf)) or ng/dscm TEQ ($gr/10^9$dscf)	16 (7.0) or 0.013 (0.0057)	0.85 (0.37) or 0.020 (0.0087)	9.3 (4.1) or 0.054 (0.024)	3-run average (4-hour minimum sample time per run)	EPA Reference Method 23 of Appendix A–7 of part 60.
Hydrogen chloride	ppmv	44 or 15 or 99%[3]	7.7	6.6	3-run average (1-hour minimum sample time per run)	EPA Reference Method 26 or 26A of Appendix A–8 of part 60.
Sulfur dioxide	ppmv	4.2	4.2	9.0	3-run average (1-hour minimum sample time per run)	EPA Reference Method 6 or 6C of Appendix A–4 of part 60.
Nitrogen oxides	ppmv	190	190	140	3-run average (1-hour minimum sample time per run)	EPA Reference Method 7 or 7E of Appendix A–4 of part 60.
Lead	mg/dscm (grains per thousand dry standard cubic feet ($gr/10^3$dscf))	0.31 (0.14)	0.018 (0.0079)	0.036 (0.016)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A–8 of part 60.
Cadmium	mg/dscm ($gr/10^3$dscf)	0.017 (0.0074)	0.013 (0.0057)	0.0092 (0.0040)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A–8 of part 60.
Mercury	mg/dscm ($gr/10^3$dscf)	0.014 (0.0061)	0.025 (0.011)	0.018 (0.0079)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A–8 of part 60.

[1] Except as allowed under section 60.56c(c) for HMIWI equipped with Continuous Emission Monitoring System (CEMS).

[2] Does not include CEMS and approved alternative non-EPA test methods allowed under section 60.56c(b).

[3] HMIWI constructed after June 20, 1996, but no later than December 1, 2008, or for which modification is commenced after March 16, 1998, but no later than April 6, 2010.

2. *[Small rural]* **No owner or operator of a small** HMIWI **constructed on or before June 20, 1996, which is** located more than fifty (50) miles from the boundary of the nearest Standard Metropolitan Statistical Area and which burns less than two thousand (2,000) pounds per week of hospital waste and medical/infectious waste shall *[comply with the emission limits described in subparagraphs (3)(A)2.A. and B. of this rule]* **cause to be discharged into the atmosphere any gases that contain stack emissions in excess of the limits presented in Table 2 of this paragraph**. The two thousand (2,000) pounds per week limitation does not apply during performance tests.

[A. On or after the date on which the initial equipment inspection is completed or September 1, 2000, whichever date comes first, no owner or operator of an existing small rural HMIWI shall cause to be discharged into the atmosphere from that HMIWI any gases that contain stack emissions in excess of the limits presented in Table 2 of this subparagraphs.]

[TABLE 2. EMISSION LIMITS FOR SMALL RURAL HMIWI

Pollutant	*Units (7 percent oxygen, dry basis)*	*HMIWI Emission limits*
Particulate matter	*milligrams per dry standard cubic meter (grains per dry standard cubic foot)*	*197 (0.086)*
Carbon monoxide	*parts per million by volume*	*40*
Dioxins/furans	*nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)*	*800 (350) or 15 (6.6)*
Hydrogen chloride	*parts per million by volume*	*3100*
Sulfur dioxide	*parts per million by volume*	*55*
Nitrogen oxides	*parts per million by volume*	*250*
Lead	*milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)*	*10 (4.4)*
Cadmium	*milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)*	*4 (1.7)*
Mercury	*milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)*	*7.5 (3.3)]*

Table 2—Emissions Limits for Small HMIWI Which Meet the Criteria Under Paragraph (3)(A)2. of this Rule

Pollutant	Units (7 percent oxygen, dry basis)	HMIWI Emissions limits	Averaging time[1]	Method for demonstrating compliance[2]
Particulate matter	mg/dscm (gr/dscf)	87 (0.038)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 5 of Appendix A–3 of part 60 or EPA Reference Method 26A or 29 of Appendix A–8 of part 60.
Carbon monoxide	ppmv	20	3-run average (1-hour minimum sample time per run)	EPA Reference Method 10 or 10B of Appendix A–4 of part 60.
Dioxins/furans	ng/dscm total dioxins/furans (gr/10^9dscf) or ng/dscm TEQ (gr/10^9dscf)	240 (100) or 5.1 (2.2)	3-run average (4-hour minimum sample time per run)	EPA Reference Method 23 of Appendix A–7 of part 60.
Hydrogen chloride	ppmv	810	3-run average (1-hour minimum sample time per run)	EPA Reference Method 26 or 26A of Appendix A–8 of part 60.
Sulfur dioxide	ppmv	55	3-run average (1-hour minimum sample time per run)	EPA Reference Method 6 or 6C of Appendix A–4 of part 60.
Nitrogen oxides	ppmv	130	3-run average (1-hour minimum sample time per run)	EPA Reference Method 7 or 7E of Appendix A–4 of part 60.
Lead	mg/dscm (gr/10^3dscf)	0.50 (0.22)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A–8 of part 60.
Cadmium	mg/dscm (gr/10^3dscf)	0.11 (0.048)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A–8 of part 60.
Mercury	mg/dscm (gr/10^3dscf)	0.0051 (0.0022)	3-run average (1-hour minimum sample time per run)	EPA Reference Method 29 of Appendix A–8 of part 60.

[1] **Except as allowed under section 60.56c(c) for HMIWI equipped with CEMS.**
[2] **Does not include CEMS and approved alternative non-EPA test methods allowed under section 60.56c(b).**

[B. On or after the date on which the initial inspection is completed or September 1, 2000, whichever date comes first, no owner or operator of an existing small rural HMIWI shall cause to be discharged into the atmosphere from the stack of that HMIWI any gases that exhibit greater than ten percent (10%) opacity (six (6)-minute block average).]

3. *[On or after the date on which the initial performance test is completed or September 1, 2000, whichever date comes first, no]* **No** owner or operator of an *[existing]* HMIWI **subject to this rule** shall cause to be discharged into the atmosphere from the stack of that HMIWI any gases that exhibit greater than *[ten]* **six** percent (*[10]***6**%) opacity (six (6)-minute block average).

(B) Operator Training and Qualification Requirements.

1. No owner or operator of an *[existing]* HMIWI **subject to this rule** shall allow the HMIWI to operate at any time unless a fully trained and qualified HMIWI operator is accessible, either at the facility or available within one (1) hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one (1) or more HMIWI operators.

2. Operator training and qualification shall be obtained by completing the requirements included in paragraphs (3)(B)3. through 7. of this rule.

3. Training shall be obtained by completing an HMIWI operator training course that includes, at a minimum, the following provisions:

A. Twenty-four (24) hours of training on the following subjects:

(I) Environmental concerns, including pathogen destruction and types of emissions;

(II) Basic combustion principles, including products of combustion;

(III) Operation of the type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures;

(IV) Combustion controls and monitoring;

(V) Operation of air pollution control equipment and factors affecting performance (if applicable);

(VI) Methods to monitor pollutants and equipment calibration procedures (where applicable);

(VII) Inspection and maintenance of the HMIWI, air pollution control devices, and continuous emission monitoring systems;

(VIII) Actions to correct malfunctions or conditions that may lead to malfunction;

(IX) Bottom and fly ash characteristics and handling procedures;

(X) Applicable federal, state, and local regulations;

(XI) Work safety procedures;

(XII) Pre-startup inspections; and

(XIII) Record-keeping requirements;

B. An examination designed and administered by the instructor; and

C. Reference material distributed to the attendees covering the course topics.

4. Qualifications shall be obtained by—

A. Completion of a training course that satisfies the criteria under paragraph (3)(B)3. of this rule; and

B. Either six (6) months experience as an HMIWI operator, six (6) months experience as a direct supervisor of an HMIWI operator, or completion of at least two (2) burn cycles under the observation of two (2) qualified HMIWI operators.

5. Qualification is valid from the date on which the examination is passed or the completion of the required experience, whichever is later.

6. To maintain qualification, the trained and qualified HMIWI operator shall complete and pass an annual review or refresher course of at least four (4) hours covering, at a minimum, the following:

A. Update of regulations;

B. Incinerator operation, including startup and shutdown procedures;

C. Inspection and maintenance;

D. Responses to malfunctions or conditions that may lead to malfunction; and

E. Discussion of operating problems encountered by attendees.

7. A lapsed qualification shall be renewed by one (1) of the following methods:

A. For a lapse of less than three (3) years, the HMIWI operator shall complete and pass a standard annual refresher course described in paragraph (3)(B)6. of this rule; or

B. For a lapse of three (3) years or more, the HMIWI operator shall complete and pass a training course with the minimum criteria described in paragraph (3)(B)3. of this rule.

8. The owner or operator of an HMIWI shall maintain documentation at the facility that address the following:

A. Summary of the applicable standards under this subpart;

B. Description of basic combustion theory applicable to an HMIWI;

C. Procedures for receiving, handling, and charging waste;

D. HMIWI startup, shutdown, and malfunction procedures;

E. Procedures for maintaining proper combustion air supply levels;

F. Procedures for operating the HMIWI and associated air pollution control systems within the standards established under this subpart;

G. Procedures for responding to periodic malfunction or conditions that may lead to malfunction;

H. Procedures for monitoring HMIWI emissions;

I. Reporting and record-keeping procedures; and

J. Procedures for handling ash.

9. The owner or operator of an HMIWI shall establish a program for reviewing the information listed in paragraph (3)(B)8. of this rule annually with each HMIWI operator.

A. The initial review of the information listed in paragraph (3)(B)8. of this rule shall be conducted *[within six (6) months after the effective date of this rule or]* prior to assumption of responsibilities affecting HMIWI operation*[, whichever date is later]*.

B. Subsequent reviews of the information listed in paragraph (3)(B)8. of this rule shall be conducted annually.

10. The information listed in paragraph (3)(B)8. of this rule shall be kept in a readily-accessible location for all HMIWI operators. This information, along with records of training**,** shall be available for inspection by the department or its delegated enforcement agent upon request.

(C) Waste Management Plan. The owner or operator of an HMIWI shall prepare a waste management plan. The waste management plan shall identify both the feasibility and the approach to separate certain components of solid waste from the health care waste stream in order to reduce the amount of toxic emissions from incinerated waste. A waste management plan may include, but is not limited to, elements such as **segregation and recycling of** paper, cardboard, plastics, glass, *[battery, or metal recycling; or]* **batteries, food waste, and metals (e.g., aluminum cans, metals-containing devices); segregation of non-recyclable wastes (e.g., polychlorinated biphenyl-containing waste, pharmaceutical waste, and mercury-containing waste, such as dental waste); and** purchasing recycled or recyclable products. A waste management plan may include different goals or approaches for different areas or departments of the facility and need not include new waste management goals for every waste stream. It should identify, where possible, reasonably available additional waste management measures, taking into account the effectiveness of waste management measures already in place, the costs of additional measures, the emission reductions expected to be achieved, and any other environmental or energy impacts they might have. The *[American Hospital Association]* **development of the waste management plan shall consider the** publication entitled *An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities [(incorporated by reference) shall be considered in the development of the waste management plan.]* **(Catalog No. 057007), copyright year 1993, and hereby incorporated by reference in this rule, as published by the American Hospital Association Services, Inc., PO Box 92683, Chicago, IL 60675-2683. This rule does not incorporate any subsequent amendments or additions to this publication. The owner or operator of each commercial HMIWI company shall conduct training and education programs in waste segregation for each of the company's waste generator clients and ensure that each client prepares its own waste management plan that includes, but is not limited to, the provisions listed previously in this subsection.**

(D) Inspection Guidelines.

1. Each **HMIWI subject to the emission limits under paragraph (3)(A)1. of this rule and each** small *[rural]* HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule shall undergo an initial equipment inspection *[by September 1, 2000.]* **that is at least as protective as the following:**

A. At a minimum, an inspection shall include the following:

(I) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation**, and clean pilot flame sensor, as necessary**;

(II) Ensure proper adjustment of primary and secondary chamber combustion air**, and adjust as necessary**;

(III) Inspect hinges and door latches **and lube as necessary**;

(IV) Inspect dampers, fans**,** and blowers for proper operation;

(V) Inspect HMIWI door and door gaskets for proper sealing;

(VI) Inspect motors for proper operation;

(VII) Inspect primary chamber refractory lining **and clean and repair/replace as necessary**;

(VIII) Inspect incinerator shell for corrosion and/or hot spots;

(IX) Inspect secondary/tertiary chamber and stack**; clean as necessary**;

(X) Inspect mechanical loader, including limit switches, for proper operation, if applicable;

(XI) Visually inspect waste bed (grates) **and repair/seal, as necessary**;

(XII) For the burn cycle that follows the inspection, document that the incinerator is operating properly **and make any necessary adjustments**;

(XIII) Inspect air pollution control devices for proper operation, if applicable;

(XIV) Inspect waste heat boiler systems to ensure proper operation, if applicable;

(XV) Inspect bypass stack components;

(XVI) Ensure proper calibration of thermocouples, sorbent feed systems**,** and any other monitoring equipment; and

(XVII) Generally observe that the equipment is maintained in good operating condition*[.]***; and**

B. Within ten (10) operating days following an equipment inspection all necessary repairs shall be completed unless the owner or operator obtains written approval from the department or local air pollution control authority establishing a date whereby all necessary repairs of the designated facility shall be completed.

2. Each **HMIWI subject to the emissions limits under paragraph (3)(A)1. of this rule and each** small *[rural]* HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule shall undergo an equipment inspection annually (no more than twelve (12) months following the previous annual equipment inspection), as outlined in *[sub]*paragraph*[s]* (3)(D)1.*[A. and B.]* of this rule.

3. Each HMIWI subject to the emissions limits under paragraph (3)(A)1. of this rule and each small HMIWI subject to the emissions limits under paragraph (3)(A)2. of this rule shall undergo an initial air pollution control device inspection, as applicable, that is at least as protective as the following:

A. At a minimum, an inspection shall include the following:

(I) Inspect air pollution control device(s) for proper operation, if applicable;

(II) Ensure proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment; and

(III) Generally observe that the equipment is maintained in good operating condition; and

B. Within ten (10) operating days following an air pollution control device inspection, all necessary repairs shall be completed unless the owner or operator obtains written approval from the Missouri Department of Natural Resources' Air Pollution Control Program establishing a date whereby all necessary repairs of the designated facility shall be completed.

4. Each HMIWI subject to the emissions limits under paragraph (3)(A)1. of this rule and each small HMIWI subject to the emissions limits under paragraph (3)(A)2. of this rule shall undergo an air pollution control device inspection, as applicable, annually (no more than twelve (12) months following the previous annual air pollution control device inspection), as outlined in paragraph (3)(D)3. of this rule.

(E) Compliance and Performance Testing.

1. The emission limits under this rule apply at all times *[except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical/infectious waste is charged to the HMIWI during startup, shutdown, or malfunction]*.

2. Except as provided in paragraph (3)(E)*[11.]***12.** of this rule, the owner or operator of an HMIWI **subject to this rule** shall conduct an initial performance test to determine compliance with the emission limits using the procedures and test methods listed in subparagraphs (3)(E)2.A. through *[K.]***L.** of this rule. The use of the bypass stack during a performance test shall invalidate the performance test. **For small HMIWIs as defined in paragraph (3)(A)2. of this rule, the two-thousand (2,000)-pound-per-week limitation does not apply during performance tests.**

A. All performance tests shall consist of a minimum of three (3) test runs conducted under representative operating conditions.

B. The minimum sample time shall be one (1) hour per test run unless otherwise indicated.

C. **The sampling location and number of traverse points shall be determined using** EPA Reference Method 1 of 40 CFR part 60, *[a]***A**ppendix A *[(incorporated by reference) shall be used to select the sampling location and number of traverse points.]***, promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions.**

D. **Gas composition shall be analyzed and include a measurement of oxygen concentration using** EPA Reference Method 3**, 3A** or *[3A]***3B** of 40 CFR part 60, *[a]***A**ppendix A**–2** *[(incorporated by reference)]***, promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions and** shall be used for gas composition analysis, including measurement of oxygen concentration. EPA Reference Method 3**, 3A** or *[3A]***3B** shall be used simultaneously with each **of the other EPA** reference methods. **As an alternative to EPA Reference Method 3B, ASME PTC–19–10–1981–Part 10, American Society of Mechanical Engineers (ASME), PO Box 2900, 22 Law Drive, Fairfield, NJ, 07007–2900, may be used. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.**

E. The pollutant concentrations shall be adjusted to seven percent (7%) oxygen using the following equation:

$$C_{adj} = C_{meas} (20.9 - 7) / (20.9 - \% O_2)$$

where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen
C_{meas} = pollutant concentration measured on a dry basis
(20.9 – 7) = 20.9 percent oxygen – 7 percent oxygen (defined oxygen correction basis)
20.9 = oxygen concentration in air, percent
% O_2 = oxygen concentration measured on a dry basis, percent

F. **Particulate Matter (PM) emissions shall be measured using** EPA Reference Method 5 *[or 29 of 40 CFR part 60, appendix A (incorporated by reference) shall be used to measure the PM emissions.]* **of 40 CFR part 60, Appendix A–3, promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions. An acceptable alternate method for measuring PM emissions is Method 26A or Method 29 of 40 CFR part 60, Appendix A–8, promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions. As an alternative, PM Continuous Emission Monitoring System (CEMS) may also be used as specified in subparagraph (3)(E)3.C. of this rule.**

G. **Stack opacity shall be measured using** EPA Reference Method 9 of 40 CFR part 60, *[appendix A (incorporated by reference) shall be used to measure stack opacity.]* **Appendix**

A–4 promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions. As an alternative, demonstration of compliance with the PM standards using bag leak detection systems as specified in paragraph (3)(E)11. of this rule or PM CEMS as specified in subparagraph (3)(E)3.C. of this rule is considered demonstrative of compliance with the opacity requirements.

H. **Carbon monoxide (CO) emissions shall be measured using** EPA Reference Method 10 or 10B of 40 CFR part 60, *[appendix A (incorporated by reference) shall be used to measure the CO emissions.]* **Appendix A–4 promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions. As an alternative, CO CEMS may be used as specified in subparagraph (3)(E)3.C. of this rule.**

I. **Total dioxin/furan emissions shall be measured using** EPA Reference Method 23 of 40 CFR part 60, *[appendix A (incorporated by reference) shall be used to measure total dioxin/furan emissions.]* **Appendix A–7 promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions. As an alternative, an owner or operator may elect to sample dioxins/furans by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring dioxin/furan emissions. Sampling shall be done using Method 23 of Appendix A–7, of 40 CFR part 60, promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions.** The minimum sample time shall be four (4) hours per test run. If the affected facility has selected the toxic equivalency standards for dioxin/furans the following procedures shall be used to determine compliance:

(I) Measure the concentration of each dioxin/furan tetra- through octa-congener emitted using EPA Reference Method 23 **of 40 CFR part 60, promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions**;

(II) For each dioxin/furan congener measured in accordance with part (3)(E)2.I.(I) of this rule, multiply the congener concentration by its corresponding toxic equivalency factor specified in Table 3 of this part; and

[TABLE 3. TOXIC EQUIVALENCY FACTORS]

Table 3—Toxic Equivalency Factors

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.001

(III) Sum the products calculated in accordance with part (3)(E)2.I.(II) of this rule to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

J. **Hydrogen chloride (HCl) shall be measured using** EPA Reference Method 26 **or 26A** of 40 CFR part 60, *[appendix A (incorporated by reference) shall be used to measure HCl emissions. If the affected facility has selected the percentage reduction standards for HCl under section (3) of this rule, the percentage reduction in HCl emissions ($\%R_{HCl}$) is computed using the following formula:*

$$(\%R_{HCl}) = \frac{(E_i - E_o)}{E_i} \times 100$$

where:

$\%R_{HCl}$ = percentage reduction of HCl emission achieved

E_i = HCl emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis)

E_o = HCl emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis)] **Appendix A-8 promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions. As an alternative, HCl CEMS may be used as specified in subparagraph (3)(E)3.C. of this rule.**

K. **Lead (Pb), cadmium (Cd), and mercury (Hg) emissions shall be measured using** EPA Reference Method 29 *[shall be used to measure Lead (Pb), Cadmium (Cd), and Hg emissions. If the affected facility has selected the percentage reduction standards for metals under section (3) of this rule, the percentage reduction in emissions ($\%R_{metal}$) is computed using the following formula:*

$$(\%R_{metal}) \frac{(E_i - E_o)}{E_i} \times 100$$

where:

$\%R_{metal}$ = percentage reduction of metal emission (Pb, Cd, or Hg) achieved

E_i = metal emission concentration (Pb, Cd, or Hg) measured at the control device inlet, corrected to 7 percent oxygen (dry basis)

E_o = metal emission concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent

oxygen (dry basis)] **of 40 CFR part 60, Appendix A-8, promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions. As an alternative, Hg emissions may be measured using ASTM D6784–02. This standard is incorporated by reference in this rule, as published by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions. As an alternative for Pb, Cd, and Hg, multi-metals CEMS or Hg CEMS, may be used as specified in subparagraph (3)(E)3.C. of this rule. As an alternative, an owner or operator may elect to sample Hg by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring Hg emissions.**

L. Compliance for fugitive ash emissions shall be determined using EPA Reference Method 22 of 40 CFR part 60, Appendix A-7, promulgated as of December 21, 1971, and incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N. Capitol Street NW, Washington, DC 20401. This rule does not incorporate any subsequent amendments or additions. The minimum observation time shall be a series of three (3) one (1)-hour observations.

3. Following the date on which the initial performance test is completed *[or September 1, 2000, whichever date comes first]*, the owner or operator of an affected facility shall—

A. Determine compliance with the opacity limit by conducting an annual performance test (no more than twelve (12) months following the previous performance test) using the applicable procedures and test methods listed in paragraph (3)(E)2. of this rule;

B. Determine compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than twelve (12) months following the previous performance test) using the applicable procedures and test methods listed in paragraph (3)(E)2. of this rule. If all three (3) performance tests over a three (3)-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for the subsequent two (2) years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than thirty-six (36) months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for an additional two (2) years. If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a three (3)-year period indicate compliance with the emission limit. The use of the bypass stack during a performance test shall invalidate the performance test; and

C. Facilities using a Continuous Emission Monitoring System (CEMS) to demonstrate compliance with any of the emission limits under section (3) of this rule shall*[—]*

[(I) Determine] **determine** compliance with the appropriate emission limit(s) using a twelve (12)-hour rolling average, calculated each hour as the average of the previous twelve (12) operating hours**.** *[(not including startup, shutdown, or malfunction); and]*

[(II) Operate all CEMS in accordance with the applicable procedures under appendices B and F of 40 CFR part 60 (incorporated by reference).]

4. The owner or operator of an affected facility equipped with a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and wet scrubber shall—

A. Establish the appropriate maximum and minimum operating parameters, indicated in Table 4 of this subparagraph for each control system, as site-specific operating parameters during the initial performance test to determine compliance with the emission limits; and

[TABLE 4. OPERATING PARAMETERS TO BE MONITORED AND MINIMUM MEASUREMENT AND RECORDING FREQUENCIES]

Table 4—Operating Parameters to be Monitored and Minimum Measurement and Recording Frequencies

Operating parameters to be monitored	Minimum frequency		Control system		
	Data measurement	Data recording	Dry scrubber followed by fabric filter	Wet scrubber	Dry scrubber followed by fabric filter and wet scrubber
MAXIMUM OPERATING PARAMETERS					
Maximum charge rate	Continuous	1 per hour	✓	✓	✓
Maximum fabric filter inlet temperature	Continuous	1 per minute	✓		✓
Maximum flue gas temperature	Continuous	1 per minute		✓	✓
MIMIMUM OPERATING PARAMETERS					
Minimum secondary chamber temperature	continuous	1 per minute	✓	✓	✓
Minimum dioxin/furan sorbent flow rate	hourly	1 per hour	✓		✓
Minimum **hydrogen chloride** (HCl) sorbent flow rate	hourly	1 per hour	✓		✓
Minimum mercury (Hg) sorbent flow rate	hourly	1 per hour	✓		✓
Minimum pressure drop across the wet scrubber or minimum horsepower or amperage to wet scrubber	continuous	1 per minute		✓	✓
Minimum scrubber liquor flow rate	continuous	1 per minute		✓	✓
Minimum scrubber liquor pH	continuous	1 per minute		✓	✓

B. Following the date on which the initial performance test is completed *[or September 1, 2000, whichever date comes first]*, ensure that the affected facility does not operate above any of the applicable maximum operating parameters or below any of the applicable minimum operating parameters listed in Table 4 and measured as three (3)-hour rolling averages (calculated each hour as the average of the previous three (3) operating hours) at all times except during periods of startup, shutdown**,** and malfunction. Operating parameter limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating parameter(s) shall constitute a violation of established operating parameter(s).

5. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a dry scrubber followed by a fabric filter—

A. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;

B. Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit;

C. Operation of the affected facility above the maximum charge rate and below the minimum HCl sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;

D. Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or

E. Use of the bypass stack *[(except during startup, shutdown, or malfunction)]* shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd**,** and Hg emission limits.

6. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a wet scrubber—

A. Operation of the affected facility above the maximum charge rate and below the minimum pressure drop across the wet scrubber or below the minimum horsepower or amperage to the system (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the PM emission limit;

B. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;

C. Operation of the affected facility above the maximum charge rate, below the minimum secondary temperature, and below the minimum scrubber liquor flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit;

D. Operation of the affected facility above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;

E. Operation of the affected facility above the maximum flue gas temperature and above the maximum charge rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or

F. Use of the bypass stack *[(except during startup, shutdown, or malfunction)]* shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd**,** and Hg emission limits.

7. Except as provided in paragraph (3)(E)8. of this rule, for affected facilities equipped with a dry scrubber followed by a fabric filter and a wet scrubber—

A. Operation of the affected facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the CO emission limit;

B. Operation of the affected facility above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limit;

C. Operation of the affected facility above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit;

D. Operation of the affected facility above the maximum charge rate and below the minimum Hg sorbent flow rate (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit; or

E. Use of the bypass stack *[(except during startup, shutdown, or malfunction)]* shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd**,** and Hg emission limits.

8. The owner or operator of an affected facility may conduct a repeat performance test within thirty (30) days of violation of applicable operating parameter(s) to demonstrate that the affected facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph shall be conducted using the identical operating parameters that indicated a violation under paragraphs (3)(E)5., 6., or 7. of this rule.

9. The owner or operator of an affected facility using an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber**, or selective noncatalytic reduction technology,** to comply with the emission limits under section (3) of this rule shall petition the administrator for other site-specific operating parameters to be established during the initial performance test and continuously monitored thereafter. The owner or operator shall not conduct the initial performance test until after the petition has been approved by the administrator.

10. The owner or operator of an affected facility may conduct a repeat performance test at any time to establish new values for the operating parameters. The department may request a repeat performance test at any time.

11. The owner or operator of an affected facility that uses an air pollution control device that includes a fabric filter and is not demonstrating compliance using PM CEMS, determines compliance with the PM emissions limit using a bag leak detection system, and meets the requirements in subparagraphs (3)(E)11.A. through L. of this rule for each bag leak detection system.

A. Each triboelectric bag leak detection system may be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance" (EPA–454/R–98–015, September 1997). This document is available from the U.S. Environmental Protection Agency (U.S. EPA), Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Measurement Policy Group (D–243–02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emissions Measurement Center Continuous Emissions Monitoring. Other types of bag leak detection systems shall be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

B. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

C. The bag leak detection system sensor shall provide an output of relative PM loadings.

D. The bag leak detection system shall be equipped with a device to continuously record the output signal from the sensor.

E. The bag leak detection system shall be equipped with

an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm shall be located where it is easily heard by plant operating personnel.

F. For positive pressure fabric filter systems, a bag leak detector shall be installed in each baghouse compartment or cell.

G. For negative pressure or induced air fabric filters, the bag leak detector shall be installed downstream of the fabric filter.

H. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

I. The baseline output shall be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the "Fabric Filter Bag Leak Detection Guidance."

J. Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted. In no case may the sensitivity be increased by more than one hundred percent (100%) or decreased more than fifty percent (50%) over a three-hundred-sixty-five (365)-day period unless such adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition. Each adjustment shall be recorded.

K. Record the results of each inspection, calibration, and validation check.

L. Initiate corrective action within one (1) hour of a bag leak detection system alarm; operate and maintain the fabric filter such that the alarm is not engaged for more than five percent (5%) of the total operating time in a six (6)-month block reporting period. If inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm is counted as a minimum of one (1) hour. If it takes longer than one (1) hour to initiate corrective action, the alarm time is counted as the actual amount of time taken to initiate corrective action.

*[11.]***12.** Small *[rural]* HMIWI subject to the emissions limits under paragraph (3)(A)2. of this rule **that is not equipped with an air pollution control device** shall meet the following compliance and performance testing requirements:

[A. Conduct the performance testing requirements in paragraph (3)(E)1., subparagraphs (3)(E)2.A. through I., (3)(E)2.K. (Hg only), and (3)(E)3.A. of this rule. The two thousand (2,000) pound per week limitation does not apply during performance tests;]

*[B.]***A.** Establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits;

*[C.]***B.** Following the date on which the initial performance test is completed *[or September 1, 2000, whichever date comes first]*, ensure that the designated facility does not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three (3)-hour rolling averages (calculated as the average of the previous three (3) operating hours) at all times *[except during periods of startup, shutdown and malfunction]*. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s);

*[D.]***C.** Except as provided in subparagraph (3)(E)*[11.E.]***12.D.** of this rule, operation of the designated facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three (3)-hour rolling average) simultaneously shall constitute a violation of the PM, CO, and dioxin/furan emission limits; and

*[E.]***D.** The owner or operator of a designated facility may conduct a repeat performance test within thirty (30) days of the violation of applicable operating parameter(s) to demonstrate that the designated facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph must be conducted using the identical operating parameters that indicated a violation under subparagraph (3)(E)*[11.D.]***12.C.** of this rule.

13. The owner or operator of a designated facility subject to this rule may use the results of previous emissions tests to demonstrate compliance with the emissions limits, provided that the following conditions are met:

A. The designated facility's previous emissions tests must have been conducted using the applicable procedures and test methods listed in subparagraphs (3)(E)2.A.–L. of this rule. Previous emissions test results obtained using EPA-accepted voluntary consensus standards are also acceptable;

B. The HMIWI at the designated facility shall currently be operated in a manner (e.g., with charge rate, secondary chamber temperature, etc.) that would be expected to result in the same or lower emissions than observed during the previous emissions test(s), and the HMIWI may not have been modified such that emissions would be expected to exceed (notwithstanding normal test-to-test variability) the results from previous emissions test(s); and

C. The previous emissions test(s) must have been conducted in 1996 or later.

(F) Monitoring Requirements.

1. Except as provided for under paragraph (3)(F)5. of this rule, the owner or operator of an HMIWI **subject to this rule** shall install, calibrate (to manufacturers' specification), maintain, and operate devices (or establish methods) for monitoring the applicable maximum and minimum operating parameters listed in Table 4 *[of subparagraph (3)(E)4.A.]* of this rule **(unless CEMS are used as a substitute for certain parameters as specified)** such that these devices (or methods) measure and record values for these operating parameters at the frequency indicated in Table 4 of *[subparagraph (3)(E)4.A.]* **this rule** at all times *[except during periods of start-up and shutdown]*.

2. The owner or operator of an HMIWI shall install, calibrate (to manufacturers' specifications), maintain**,** and operate a device or method for measuring the use of the bypass stack including date, time, and duration.

3. The owner or operator of an HMIWI using something other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under section (3) of this rule shall install, calibrate (to manufacturers' specifications), maintain, and operate the equipment necessary to monitor the site-specific operating parameters developed pursuant to paragraph (3)(E)9. of this rule.

4. The owner or operator of an HMIWI shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for seventy-five percent (75%) of the operating hours per day for ninety percent (90%) of the operating days per calendar quarter that the HMIWI is combusting hospital waste and/or medical/infectious waste.

5. Small *[rural]* HMIWI subject to the emission limits under paragraph (3)(A)2. of this rule **not equipped with an air pollution control device** shall meet the following monitoring requirements:

A. Install, calibrate (to manufacturers' specification), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation;

B. Install, calibrate (to manufacturers' specification), maintain, and operate a device that automatically measures and records the date, time, and weight of each charge fed into the HMIWI; and

C. The owner or operator of a designated facility shall obtain monitoring data at all times during HMIWI operation except during

periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for seventy-five percent (75%) of the operating hours per day for ninety percent (90%) of the operating days per calendar quarter that the designated facility is combusting hospital waste and/or medical/infectious waste.

(4) Reporting and Record Keeping.

(A) *[Except as provided for under subsection (4)(F) of this rule, the]* **The** owner or operator of an HMIWI **subject to this rule** shall maintain the following information (as applicable) for a period of at least five (5) years:

1. Calendar date of each record;

2. Records of the following data:

A. Concentrations of any pollutant listed in section (3) of this rule or measurements of opacity as determined by the continuous emission monitoring system (if applicable);

B. Results of fugitive emissions (by EPA Reference Method 22) tests, if applicable;

*[B.]***C.** HMIWI charge dates, times, and weights and hourly charge rates;

*[C.]***D.** Fabric filter inlet temperatures during each minute of operation, as applicable;

*[D.]***E.** Amount and type of dioxin/furan sorbent used during each hour of operation, as applicable;

*[E]***F.** Amount and type of Hg sorbent used during each hour of operation, as applicable;

*[F.]***G.** Amount and type of HCl sorbent used during each hour of operation, as applicable;

H. Amount and type of Nitrogen Oxides (NO_x) reagent used during each hour of operation, as applicable;

*[G.]***I.** Secondary chamber temperatures recorded during each minute of operation;

*[H.]***J.** Liquor flow rate to the wet scrubber inlet during each minute of operation, as applicable;

*[I.]***K.** Horsepower or amperage to the wet scrubber during each minute of operation, as applicable;

*[J.]***L.** Pressure drop across the wet scrubber system during each minute of operation, as applicable;

*[K.]***M.** Temperature at the outlet from the wet scrubber during each minute of operation, as applicable;

*[L.]***N.** pH of the scrubber liquor at the inlet to the wet scrubber during each minute of operation, as applicable;

*[M.]***O.** Records indicating use of the bypass stack, including dates, times, and durations; *[and]*

*[N.]***P.** For HMIWI complying with paragraph (3)(E)9. and paragraph (3)(F)3. of this rule, the owner or operator shall maintain all operating parameter data collected; **and**

Q. For affected facilities as defined in this rule, records of the annual equipment inspections, annual air pollution control device inspections, any required maintenance, and any repairs not completed within ten (10) days of an inspection or the time frame established by the director;

3. Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (4)(A)2. of this rule have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken;

4. Identification of calendar days, times**,** and durations of malfunctions, a description of the malfunction**,** and the corrective action taken;

5. Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (4)(A)2. of this rule exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken;

6. The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating parameters, as applicable**, and a description, including sample calculations, of how the operating parameters were established or re-established, if applicable**;

7. Records showing the names of HMIWI operators who have completed review of the information in paragraph (3)(B)8. of this rule as required by paragraph (3)(B)9. of this rule, including the date of the initial review and all subsequent annual reviews;

8. Records showing the names of the HMIWI operators who have completed the operator training requirements, including documentation of training and the dates of the training;

9. Records showing the names of the HMIWI operators who have met the criteria for qualification under subsection (3)(B) of this rule and the dates of their qualification; and

10. Records of calibration of any monitoring devices as required under paragraphs (3)(F)1.*[, 2., and 3.]* **through 5.** of this rule.

(B) The owner or operator of an HMIWI shall submit to the department the information specified in paragraphs (4)(B)1. through 3. of this rule no later than sixty (60) days following the initial performance test. All reports shall be signed by the facilities manager.

1. The initial performance test data as recorded under subparagraphs (3)(E)2.A. through *[K.]***L.** of this rule, as applicable.

2. The values for the site-specific operating parameters established pursuant to paragraph*[s]* (3)(E)4. or 9. of this rule, as applicable**, and a description, including sample calculations, of how the operating parameters were established during the initial performance test**.

3. The waste management plan as specified in subsection (3)(C) of this rule.

(C) An annual report shall be submitted to the department one (1) year following the submission of the information in subsection (4)(B) of this rule and subsequent reports shall be submitted no more than twelve (12) months following the previous report (once the unit is subject to permitting requirements under Title V of the Clean Air Act, the owner or operator of an affected facility must submit these reports semiannually). The annual report shall include the information specified in paragraphs (4)(C)1. through 8. of this rule. All reports shall be signed by the facilities manager.

1. The values for the site-specific operating parameters established pursuant to paragraph (3)(E)4.**, 8.,** or 9. of this rule, as applicable.

2. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the calendar year being reported, pursuant to paragraph (3)(E)4.**, 8.,** or 9. of this rule, as applicable.

3. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each operating parameter recorded pursuant to paragraph (3)(E)4.**, 8.,** or 9. of this rule for the calendar year preceding the year being reported, in order to provide the department with a summary of the performance of the affected facility over a two (2)-year period.

4. Any information recorded under paragraphs (4)(A)3. through 5. of this rule for the calendar year being reported.

5. Any information recorded under paragraphs (4)(A)3. through 5. of this rule for the calendar year preceding the year being reported, in order to provide the department with a summary of the performance of the affected facility over a two (2)-year period.

6. If a performance test was conducted during the reporting period, the results of that test.

7. If no exceedances or malfunctions were reported under paragraphs (4)(A)3. through 5. of this rule for the calendar year being reported, a statement that no exceedances occurred during the reporting period.

8. Any use of the bypass stack, the duration, reason for malfunction, and corrective action taken.

(F) The owner or operator of a**n** *[small rural]* HMIWI *[subject to the emission limits under paragraph (3)(A)2. of this rule shall—*

1. Maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within ten (10) days of an inspection or the time frame established by the inspector; and

2. Submit] **shall submit** an annual report to the department containing information recorded under **subparagraph** *[(4)(F)1.]***(4)(A)2.Q.** of this rule no later than sixty (60) days following the year in which data were collected. Subsequent reports shall be sent no later than twelve (12) calendar months following the previous report (once the unit is subject to permitting requirements under Title V of the Clean Air Act, the owner or operator must submit these reports semiannually). The report shall be signed by the facilities manager.

(5) Test Methods. Test methods can be found in subparagraphs (3)(E)2.A. through *[(3)(E)2.K.]***L.** of this rule.

*AUTHORITY: section 643.050, RSMo [Supp. 1999] **2000**. Original rule filed Dec. 1, 1998, effective July 30, 1999. Amended: Filed Oct. 13, 2000, effective July 30, 2001. Amended: Filed Nov. 26, 2010.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

PROPOSED AMENDMENT

10 CSR 10-6.300 Conformity of General Federal Actions to State Implementation Plans. This proposed amendment will amend the rule purpose, amend sections (1) through (5), and delete sections (6) through (11). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule implements section 176(c) of the Clean Air Act, as amended (42 U.S.C. 7401–7671q.), and regulations under 40 CFR 93, Subpart B, with respect to the conformity of general federal actions to the applicable implementation plan. Under those authorities, no department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan. This rule sets forth policy, criteria, and procedures for demonstrating and assuring conformity of such actions to the applicable implementation plan. This rule applies to all areas in the state of Missouri which are designated as nonattainment or maintenance for any criteria pollutant or standard for which there is a national ambient air quality standard (NAAQS). This amendment will improve the process federal entities use to demonstrate that their actions will not contribute to a NAAQS violation, provide tools to encourage better communication and air quality planning between the state and federal agencies, and encourage both federal agencies and the state to take early action to ensure projects will conform to the state's implementation plans. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is Federal Register Notice 75 FR 17254–17279, promulgated April 5, 2010.

*PURPOSE: This rule implements section 176(c) of the Clean Air Act, as amended (42 U.S.C. 7401–7671q.)**,** and regulations under **[***40 CFR part 51 subpart W]* ***40 CFR 93, Subpart B****, with respect to the conformity of general federal actions to the applicable implementation plan. Under those authorities, no department, agency**, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan. This rule sets forth policy, criteria, and procedures for demonstrating and assuring conformity of such actions to the applicable implementation plan. This rule applies to all areas in the state of Missouri which are designated as nonattainment or maintenance for any criteria pollutant or standard for which there is a national ambient air quality standard.*

[(1) General.

(A) No department, agency or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan.

(B) Under Clean Air Act (CAA) section 176(c) and 40 CFR part 51 subpart W, a federal agency must make a determination that a federal action conforms to the applicable implementation plan in accordance with the requirements of this rule before the action is taken.

(C) Subsection (1)(B) of this rule does not include federal actions where either—

1. A National Environmental Policy Act (NEPA) analysis was completed as evidenced by a final environmental assessment (EA), environmental impact statement (EIS), or finding of no significant impact (FONSI) that was prepared prior to January 31, 1994; or

2. All of the following conditions are met:

A. Prior to January 31, 1994, an EA was commenced or a contract was awarded to develop the specific environmental analysis;

B. Sufficient environmental analysis is completed by March 15, 1994, so that the federal agency may determine that the federal action is in conformity with the specific requirements and the purposes of the applicable implementation plan pursuant to the agency's affirmative obligation under section 176(c) of the CAA; and

C. A written determination of conformity under section 176(c) of the CAA has been made by the federal agency responsible for the federal action by March 15, 1994.

(D) Notwithstanding any provision of this rule, a determination that an action is in conformity with the applicable implementation plan does not exempt the action from any

other requirements of the applicable implementation plan, the NEPA, or the CAA.

(2) Definitions.

(A) Terms used but not defined in this rule shall have the meaning given them by the CAA and Environmental Protection Agency's (EPA's) regulations, in that order of priority. Definitions for some terms used in this rule may be found in 10 CSR 10-6.020.

(B) Additional definitions specific to this rule are as follows:

1. Affected federal land manager—the federal agency or the federal official charged with direct responsibility for management of an area designated as Class I under the CAA (42 U.S.C. 7472) that is located within one hundred kilometers (100 km) of the proposed federal action;

2. Applicable implementation plan—the portion of the implementation plan, or most recent revision thereof, which has been approved under section 110 of the CAA, or promulgated under section 110(c) of the CAA (federal implementation plan), or promulgated or approved pursuant to regulations promulgated under section 301(d) of the CAA and which implements the relevant requirements of the CAA;

3. Area wide air quality modeling analysis—an assessment on a scale that includes the entire nonattainment or maintenance area which uses an air quality dispersion model to determine the effects of emissions on air quality;

4. CAA—the Clean Air Act, as amended;

5. Cause or contribute to a new violation—a federal action that—

A. Causes a new violation of a national ambient air quality standard (NAAQS) at a location in a nonattainment or maintenance area which would otherwise not be in violation of the standard during the future period in question if the federal action were not taken; or

B. Contributes, in conjunction with other reasonably foreseeable actions, to a new violation of a NAAQS at a location in a nonattainment or maintenance area in a manner that would increase the frequency or severity of the new violation;

6. Caused by, as used in the terms "direct emissions" and "indirect emissions"—
emissions that would not otherwise occur in the absence of the federal action;

7. Criteria pollutant or standard—any pollutant for which there is established a NAAQS at 40 CFR part 50;

8. Direct emissions—those emissions of a criteria pollutant or its precursors that are caused or initiated by the federal action and occur at the same time and place as the action;

9. Emergency—a situation where extremely quick action on the part of the federal agencies involved is needed and where the timing of such federal activities makes it impractical to meet the requirements of this rule, such as natural disasters like hurricanes or earthquakes, civil disturbances such as terrorist acts, and military mobilizations;

10. Emissions budgets—those portions of the total allowable emissions defined in an EPA approved revision to the applicable implementation plan for a certain date for the purpose of meeting reasonable further progress milestones or attainment or maintenance demonstrations, for any criteria pollutant or its precursors, specifically allocated by the applicable implementation plan to mobile sources, to any stationary source or class of stationary sources, to any federal action or class of action, to any class of area sources, or to any subcategory of the emissions inventory. The allocation system must be specific enough to assure meeting the criteria of section 176(c)(1)(B) of the CAA. An emissions budget may be expressed in terms of an annual period, a daily period, or other period established in the applicable implementation plan;

11. Emission offsets, for purposes of section (8) of this rule—emissions reductions which are quantifiable, consistent with the applicable implementation plan attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable implementation plan provisions, enforceable under both state and federal law, and permanent within the time frame specified by the program. Emissions reductions intended to be achieved as emissions offsets under this rule must be monitored and enforced in a manner equivalent to that under EPA's new source review requirements;

12. Emissions that a federal agency has a continuing program responsibility for—emissions that are specifically caused by an agency carrying out its authorities, and does not include emissions that occur due to subsequent activities, unless such activities are required by the federal agency. Where an agency, in performing its normal program responsibilities, takes actions itself or imposes conditions that result in air pollutant emissions by a nonfederal entity taking subsequent actions, such emissions are covered by the meaning of a continuing program responsibility;

13. EPA—the United States Environmental Protection Agency;

14. Federal action—any activity engaged in by a department, agency, or instrumentality of the federal government, or any activity that a department, agency or instrumentality of the federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.). Where the federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the federal permit, license, or approval;

15. Federal agency—for purposes of this rule, a federal department, agency, or instrumentality of the federal government;

16. Increase the frequency or severity of any existing violation of any standard in any area—to cause a nonattainment area to exceed a standard more often or to cause a violation at a greater concentration than previously existed or would otherwise exist during the future period in question, if the project were not implemented;

17. Indirect emissions—those emissions of a criteria pollutant or its precursors that—

A. Are caused by the federal action, but may occur later in time or may be farther removed in distance from the action itself but are still reasonably foreseeable; and

B. The federal agency can practicably control and will maintain control due to a continuing program responsibility of the federal agency, including, but not limited to—

(I) Traffic on or to, or stimulated or accommodated by, a proposed facility which is related to increases or other changes in the scale or timing of operations of such facility;

(II) Emissions related to the activities of employees of contractors or federal employees;

(III) Emissions related to employee commutation and similar programs to increase average vehicle occupancy imposed on all employers of a certain size in the locality; or

(IV) Emissions related to the use of federal facilities under lease or temporary permit;

18. Local air quality modeling analysis—an assessment of localized impacts on a scale smaller than the entire nonattainment or maintenance area, including, for example, congested roadway intersections and highways or transit terminals, which uses an air quality dispersion model to determine the effects of emissions on air quality;

19. Maintenance area—any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA;

20. Maintenance plan—a revision to the applicable implementation plan, meeting the requirements of section 175A of the CAA;

21. Metropolitan planning organization (MPO)—that organization designated as being responsible, together with the state, for conducting the continuing, cooperative, and comprehensive planning process under 23 U.S.C. 134 and 49 U.S.C. 1607;

22. Milestone—has the meaning given in sections 182(g)(1) and 189(c)(1) of the CAA. A milestone consists of an emissions level and the date on which it is required to be achieved;

23. National ambient air quality standards (NAAQS)—those standards established pursuant to section 109 of the CAA and include standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone, particulate matter (PM_{10}), and sulfur dioxide (SO_2);

24. NEPA—the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.);

25. Nonattainment area (NAA)—any geographic area of the United States which has been designated as nonattainment under section 107 of the CAA and described in 40 CFR part 81;

26. Precursors of a criteria pollutant are—

A. For ozone, nitrogen oxides (NO_x) (unless an area is exempted from NO_x requirements under section 182(f) of the CAA), and volatile organic compounds (VOCs);

B. For PM_{10}, those pollutants described in the PM_{10} nonattainment area applicable implementation plan as significant contributors to the PM_{10} levels; and

C. For particulate matter with an aerodynamic diameter equal or less than 2.5 microns ($PM_{2.5}$)—

(I) Sulfur dioxide (SO_2) in all $PM_{2.5}$ nonattainment and maintenance areas;

(II) Nitrogen oxides to all $PM_{2.5}$ nonattainment and maintenance areas unless both the state and EPA determine that it is not a significant precursor; and

(III) Volatile organic compounds (VOC) and ammonia (NH_3) only in $PM_{2.5}$ nonattainment or maintenance areas where either the state or EPA determines that they are significant precursors;

27. Reasonably foreseeable emissions—projected future indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known to the extent adequate to determine the impact of such emissions; and the emissions are quantifiable, as described and documented by the federal agency based on its own information and after reviewing any information presented to the federal agency;

28. Regionally significant action—a federal action for which the direct and indirect emissions of any pollutant represent ten percent (10%) or more of a nonattainment or maintenance area's emissions inventory for that pollutant;

29. Regional water or wastewater projects—include construction, operation, and maintenance of water or wastewater conveyances, water or wastewater treatment facilities, and water storage reservoirs which affect a large portion of a nonattainment or maintenance area; and

30. Total of direct and indirect emissions—the sum of direct and indirect emissions increases and decreases caused by the federal action; that is, the net emissions considering all direct and indirect emissions. Any emissions decreases used to reduce such total shall have already occurred or shall be enforceable under state and federal law. The portion of emissions which are exempt or presumed to conform under subsections (3)(C), (D), (E), or (F) of this rule are not included in the "total of direct and indirect emissions," except as provided in subsection (3)(J). The "total of direct and indirect emissions" includes emissions of criteria pollutants and emissions of precursors of criteria pollutants. The segmentation of projects for conformity analyses when emissions are reasonably foreseeable is not permitted by this rule.

(3) Applicability.

(A) Conformity determinations for federal actions related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.) must meet the procedures and criteria of 10 CSR 10-2.390 and 10 CSR 10-5.480, in lieu of the procedures set forth in this rule.

(B) For federal actions not covered by subsection (3)(A) of this rule, a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a federal action would equal or exceed any of the rates in paragraph (3)(B)1. or 2. of this rule.

1. For purposes of subsection (3)(B) of this rule, the following rates apply in nonattainment areas (NAAs):

	Tons/Year
Ozone (VOC or NO_x)	
Serious NAAs	50
Severe NAAs	25
Extreme NAAs	10
Other ozone NAAs outside an ozone transport region	100
Marginal and moderate NAAs inside an ozone transport region	
VOC	50
NO_x	100
Carbon monoxide	
All NAAs	100
SO_2 or NO_2	
All NAAs	100
PM_{10}	
Moderate NAAs	100
Serious NAAs	70
$PM_{2.5}$	
Direct emissions	100
SO_2	100
NO_x (unless determined not to be significant precursor)	100
VOC or ammonia (if determined to be significant precursors)	100
Pb	
All NAAs	25

2. For purposes of subsection (3)(B) of this rule, the following rates apply in maintenance areas:

	Tons/Year
Ozone (NO_x), SO_2 or NO_2	
All maintenance areas	*100*
Ozone (VOC)	
Maintenance areas inside an ozone transport region	*50*
Maintenance areas outside an ozone transport region	*100*
Carbon monoxide	
All maintenance areas	*100*
PM_{10}	
All maintenance areas	*100*
$PM_{2.5}$	
Direct emissions	*100*
SO_2	*100*
NO_x (unless determined not to be significant precursor)	*100*
VOC or ammonia (if determined to be significant precursors)	*100*
Pb	
All maintenance areas	*25*

(C) The requirements of this rule shall not apply to—

1. Actions where the total of direct and indirect emissions are below the emissions levels specified in subsection (3)(B) of this rule;

2. The following actions which would result in no emissions increase or an increase in emissions that is clearly de minimis:

A. Judicial and legislative proceedings;

B. Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted;

C. Rulemaking and policy development and issuance;

D. Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities;

E. Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law enforcement personnel;

F. Administrative actions such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties and fees;

G. The routine, recurring transportation of material and personnel;

H. Routine movement of mobile assets, such as ships and aircraft, in home port reassignments and stations (when no new support facilities or personnel are required) to perform as operational groups or for repair or overhaul;

I. Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site;

J. With respect to existing structures, properties, facilities and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands, actions such as relocation of personnel, disposition of federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency;

K. The granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted;

L. Planning, studies, and provision of technical assistance;

M. Routine operation of facilities, mobile assets and equipment;

N. Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer;

O. The designation of empowerment zones, enterprise communities, or viticultural areas;

P. Actions by any of the federal banking agencies or the federal reserve banks, including actions regarding charters, applications, notices, licenses, the supervision or examination of depository institutions or depository institution holding companies, access to the discount window, or the provision of financial services to banking organizations or to any department, agency or instrumentality of the United States;

Q. Actions by the Board of Governors of the Federal Reserve System or any federal reserve bank to effect monetary or exchange rate policy;

R. Actions that implement a foreign affairs function of the United States;

S. Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and where the federal agency does not retain continuing authority to control emissions associated with the lands, facilities, title, or real properties;

T. Transfers of real property, including land, facilities, and related personal property from a federal entity to another federal entity and assignments of real property, including land, facilities, and related personal property from a federal entity to another federal entity for subsequent deeding to eligible applicants; and

U. Actions by the Department of the Treasury to effect fiscal policy and to exercise the borrowing authority of the United States;

3. Actions where the emissions are not reasonably foreseeable, such as the following:

A. Initial Outer Continental Shelf lease sales which are made on a broad scale and are followed by exploration and development plans on a project level; and

B. Electric power marketing activities that involve the acquisition, sale and transmission of electric energy; and

4. Individual actions which implement a decision to conduct or carry out a program that has been found to conform to the applicable implementation plan, such as prescribed burning actions which are consistent with a land management plan that has been found to conform to the applicable implementation plan.

(D) Notwithstanding the other requirements of this rule, a conformity determination is not required for the following federal actions (or portion thereof):

1. The portion of an action that includes major new or modified stationary sources that require a permit under the new source review (NSR) program (section 173 of the CAA) or the prevention of significant deterioration (PSD) program (Title I, part C of the CAA);

2. Actions in response to emergencies or natural disasters such as hurricanes, earthquakes, etc., which are commenced on the order of hours or days after the emergency or disaster and, if applicable, which meet the requirements of subsection (3)(E) of this rule;

3. Research, investigations, studies, demonstrations, or training other than those exempted under paragraph (3)(C)2, of this rule, where no environmental detriment is incurred or the particular action furthers air quality research, as determined by the department;

4. Alteration and additions of existing structures as specifically required by new or existing applicable environmental legislation or environmental regulations (for example, hush houses for aircraft engines and scrubbers for air emissions); and

5. Direct emissions from remedial and removal actions carried out under the CERCLA and associated regulations to the extent such emissions either comply with the substantive requirements of the PSD/NSR permitting program or are exempted from other environmental regulation under the provisions of CERCLA and applicable regulations issued under CERCLA.

(E) Federal actions which are part of a continuing response to an emergency or disaster under paragraph (3)(D)2. of this rule and which are to be taken more than six (6) months after the commencement of the response to the emergency or disaster under paragraph (3)(D)2. of this rule are exempt from the requirements of this rule only if—

1. The federal agency taking the actions makes a written determination that, for a specified period not to exceed an additional six (6) months, it is impractical to prepare the conformity analyses which would otherwise be required and the actions cannot be delayed due to overriding concerns for public health and welfare, national security interests and foreign policy commitments; or

2. For actions which are to be taken after those actions covered by paragraph (3)(E)1. of this rule, the federal agency makes a new determination as provided in paragraph (3)(E)1. of this rule.

(F) Notwithstanding other requirements of this rule, individual actions or classes of actions specified by individual federal agencies that have met the criteria set forth in either paragraph (3)(G)1. or 2. and the procedures set forth in subsection (3)(H) of this rule are presumed to conform, except as provided in subsection (3)(J) of this rule.

(G) The federal agency must meet the criteria for establishing activities that are presumed to conform by fulfilling the requirements set forth in either paragraph (3)(G)1. or 2. of this rule.

1. The federal agency must clearly demonstrate using methods consistent with this rule that the total of direct and indirect emissions from the type of activities which would be presumed to conform would not—

A. Cause or contribute to any new violation of any standard in any area;

B. Interfere with provisions in the applicable implementation plan for maintenance of any standard;

C. Increase the frequency or severity of any existing violation of any standard in any area; or

D. Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including, where applicable, emission levels specified in the applicable implementation plan for purposes of—

(I) A demonstration of reasonable further progress;

(II) A demonstration of attainment; or

(III) A maintenance plan; or

2. The federal agency must provide documentation that the total of direct and indirect emissions from such future actions would be below the emission rates for a conformity determination that are established in subsection (3)(B) of this rule, based, for example, on similar actions taken over recent years.

(H) In addition to meeting the criteria for establishing exemptions set forth in paragraph (3)(G)1. or 2. of this rule, the following procedures must also be complied with to presume that activities will conform:

1. The federal agency must identify through publication in the Federal Register its list of proposed activities that are presumed to conform and the analysis, assumptions, emissions factors, and criteria used as the basis for the presumptions;

2. The federal agency must notify the appropriate EPA regional office(s), state and local air quality agencies and, where applicable, the agency designated under section 174 of the CAA and the MPO and provide at least thirty (30) days for the public to comment on the list of proposed activities presumed to conform;

3. The federal agency must document its response to all the comments received and make the comments, response, and final list of activities available to the public upon request; and

4. The federal agency must publish the final list of such activities in the Federal Register.

(I) Notwithstanding the other requirements of this rule, when the total of direct and indirect emissions of any pollutant from a federal action does not equal or exceed the rates specified in subsection (3)(B) of this rule, but represents ten percent (10%) or more of a nonattainment or maintenance area's total emissions of that pollutant, the action is defined as a regionally significant action and the requirements of sections (1) and (5)–(10) of this rule shall apply for the federal action.

(J) Where an action presumed to be de minimis under paragraph (3)(C)1. or 2. of this rule or otherwise presumed to conform under subsection (3)(F) of this rule is a regionally significant action or where an action otherwise presumed to conform under subsection (3)(F) of this rule does not in fact meet one (1) of the criteria in paragraph (3)(G)1. of this rule, that action shall not be considered de minimis or presumed to conform and the requirements of sections (1) and (5)–(10) of this rule shall apply for the federal action.

(K) The provisions of this rule shall apply in all nonattainment and maintenance areas.

(L) Any measures used to affect or determine applicability of this rule, as determined under this section, must result in projects that are in fact de minimis, must result in such de minimis levels prior to the time the applicability determination is made, and must be state or federally enforceable. Any measures that are intended to reduce air quality impacts for this purpose must be identified (including the identification and quantification of all emission reductions claimed) and the process for implementation (including any necessary funding of such measures and tracking of such emission reductions) and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation. Prior to a determination of applicability, the federal agency making the determination must obtain written commitments from the appropriate persons or agencies to implement any measures which are identified as conditions for making such determinations. Such written commitment shall describe such mitigation measures and the nature of the commitment, in a manner consistent with the previous sentence. After this rule is approved by EPA as a revision to the applicable implementation plan, enforceability through the applicable implementation plan of any measures necessary for a determination of applicability will apply to all persons who agree to reduce direct and indirect emissions associated with a federal action for a conformity applicability determination.

(4) Conformity Analysis. Any federal department, agency, or instrumentality of the federal government taking an action subject to 40 CFR part 51 subpart W and this rule must make its own conformity determination consistent with the requirements of this rule. In making its conformity determination, a federal agency must consider comments from any interested parties. Where multiple federal agencies have jurisdiction for various aspects of a project, a federal agency may choose to adopt the analysis of another federal agency (to the extent the proposed action and impacts analyzed are the same as the project for which a conformity determination is required) or develop its own analysis in order to make its conformity determination.

(5) Reporting Requirements.

(A) A federal agency making a conformity determination under section (8) must provide to the appropriate EPA regional office(s), state and local air quality agencies and, where applicable, affected federal land managers, the agency designated under section 174 of the CAA and the MPO a thirty (30)-day notice which describes the proposed action and the federal agency's draft conformity determination on the action.

(B) A federal agency must notify the appropriate EPA regional office(s), state and local air quality agencies and, where applicable, affected federal land managers, the agency designated under section 174 of the CAA and the MPO within thirty (30) days after making a final conformity determination under section (8).

(6) Public Participation and Consultation.

(A) Upon request by any person regarding a specific federal action, a federal agency must make available for review its draft conformity determination under section (8) with supporting materials which describe the analytical methods, assumptions, and conclusions relied upon in making the applicability analysis and draft conformity determination.

(B) A federal agency must make public its draft conformity determination under section (8) by placing a notice by prominent advertisement in a daily newspaper of general circulation in the areas affected by the action and by providing thirty (30) days for written public comment prior to taking any formal action on the draft determination. This comment period may be concurrent with any other public involvement, such as occurs in the NEPA process.

(C) A federal agency must document its response to all the comments received on its draft conformity determination under section (8) and make the comments and responses available, upon request by any person regarding a specific federal action, within thirty (30) days of the final conformity determination.

(D) A federal agency must make public its final conformity determination under section (8) for a federal action by placing a notice by prominent advertisement in a daily newspaper of general circulation in the areas affected by the action within thirty (30) days of the final conformity determination.

(7) Frequency of Conformity Determinations.

(A) The conformity status of a federal action automatically lapses five (5) years from the date a final conformity determination is reported under section (5), unless the federal action has been completed or a continuous program has been commenced to implement that federal action within a reasonable time.

(B) Ongoing federal activities at a given site showing continuous progress are not new actions and do not require periodic redeterminations so long as the emissions associated with such activities are within the scope of the final conformity determination reported under section (5).

(C) If, after the conformity determination is made, the federal action is changed so that there is an increase in the total of direct and indirect emissions above the levels in subsection (3)(B), a new conformity determination is required.

(8) Criteria for Determining Conformity of General Federal Actions.

(A) An action required under section (3) to have a conformity determination for a specific pollutant, will be determined to conform to the applicable implementation plan if, for each pollutant that exceeds the rates in subsection (3)(B), or otherwise requires a conformity determination due to the total of direct and indirect emissions from the action, the action meets the requirements of subsection (8)(C) of this rule, and meets any of the following requirements:

1. For any criteria pollutant, the total of direct and indirect emissions from the action are specifically identified and accounted for in the applicable implementation plan's attainment or maintenance demonstration;

2. For ozone or nitrogen dioxide, the total of direct and indirect emissions from the action are fully offset within the same nonattainment or maintenance area through a revision to the applicable implementation plan or a measure similarly enforceable under state and federal law that effects emission reductions so that there is no net increase in emissions of that pollutant;

3. For any criteria pollutant, except ozone and nitrogen dioxide, the total of direct and indirect emissions from the action meet the requirements—

A. Specified in subsection (8)(B) of this rule, based on areawide air quality modeling analysis and local air quality modeling analysis; or

B. Specified in paragraph (8)(A)5. of this rule and, for local air quality modeling analysis, the requirement of subsection (8)(B) of this rule;

4. For CO or PM_{10}—

A. Where the department determines (in accordance with sections (5) and (6) and consistent with the applicable implementa-tion plan) that an areawide air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in subsection (8)(B) of this rule, based on local air quality modeling analysis; or

B. Where the department determines (in accordance with sections (5) and (6) and consistent with the applicable implementation plan) that an areawide air quality modeling analysis is appropriate and that a local air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in subsection (8)(B) of this rule, based on areawide modeling, or meet the requirements of paragraph (8)(A)5. of this rule; or

5. For ozone or nitrogen dioxide, and for purposes of subparagraphs (8)(A)3.B. and (8)(A)4.B. of this rule, each portion of the action or the action as a whole meets any of the following requirements:

A. Where EPA has approved a revision to an area's attainment or maintenance demonstration after 1990 and the state makes a determination as provided in part (I) or where the state makes a commitment as provided in part (II). Any such determination or commitment shall be made in compliance with sections (5) and (6).

(I) The total of direct and indirect emissions from the action (or portion thereof) is determined and documented by the department to result in a level of emissions which, together with all other emissions in the nonattainment (or

maintenance) area, would not exceed the emissions budgets specified in the applicable implementation plan.

(II) The total of direct and indirect emissions from the action (or portion thereof) is determined by the department to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would exceed an emissions budget specified in the applicable implementation plan and the department makes a written commitment to EPA which includes the following:

(a) A specific schedule for adoption and submittal of a revision to the applicable implementation plan which would achieve the needed emission reductions prior to the time emissions from the federal action would occur;

(b) Identification of specific measures for incorporation into the applicable implementation plan which would result in a level of emissions which, together with all other emissions in the nonattainment or maintenance area, would not exceed any emissions budget specified in the applicable implementation plan;

(c) A demonstration that all existing applicable implementation plan requirements are being implemented in the area for the pollutants affected by the federal action, and that local authority to implement additional requirements has been fully pursued;

(d) A determination that the responsible federal agencies have required all reasonable mitigation measures associated with their action; and

(e) Written documentation including all air quality analyses supporting the conformity determination.

(III) Where a federal agency made a conformity determination based on a state commitment under part (8)(A)5.A.(II) of this rule, such a state commitment is automatically deemed a call for an implementation plan revision by EPA under section 110(k)(5) of the CAA, effective on the date of the federal conformity determination and requiring response within eighteen (18) months or any shorter time within which the state commits to revise the applicable implementation plan;

B. The action (or portion thereof), as determined by the MPO, is specifically included in a current transportation plan and transportation improvement program which have been found to conform to the applicable implementation plan under 10 CSR 10-2.390 or 10 CSR 10-5.480;

C. The action (or portion thereof) fully offsets its emissions within the same nonattainment or maintenance area through a revision to the applicable implementation plan or an equally enforceable measure that effects emission reductions equal to or greater than the total of direct and indirect emissions from the action so that there is no net increase in emissions of that pollutant;

D. Where EPA has not approved a revision to the relevant implementation plan attainment or maintenance demonstration since 1990, the total of direct and indirect emissions from the action for the future years (described in subsection (9)(D) of this rule) do not increase emissions with respect to the baseline emissions, and—

(I) The baseline emissions reflect the historical activity levels that occurred in the geographic area affected by the proposed federal action during—

(a) Calendar year 1990;

(b) The calendar year that is the basis for the classification (or, where the classification is based on multiple years, the year that is most representative in terms of the level of activity), if a classification is promulgated in 40 CFR part 81; or

(c) The year of the baseline inventory in the PM_{10} applicable implementation plan; and

(II) The baseline emissions are the total of direct and indirect emissions calculated for the future years (described in subsection (9)(D) of this rule) using the historic activity levels (described in part (8)(A)5.D.(I) of this rule) and appropriate emission factors for the future years; or

E Where the action involves regional water or wastewater projects, such projects are sized to meet only the needs of population projections that are in the applicable implementation plan, based on assumptions regarding per capita use that are developed or approved in accordance with subsection (9)(A).

(B) The areawide and local air quality modeling analyses must—

1. Meet the requirements in section (9); and

2. Show that the action does not—

A. Cause or contribute to any new violation of any standard in any area; or

B. Increase the frequency or severity of any existing violation of any standard in any area.

(C) Notwithstanding any other requirements of this section, an action subject to this rule may not be determined to conform to the applicable implementation plan unless the total of direct and indirect emissions from the action is in compliance or consistent with all relevant requirements and milestones contained in the applicable implementation plan, such as elements identified as part of the reasonable further progress schedules, assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and work practice requirements, and such action is otherwise in compliance with all relevant requirements of the applicable implementation plan.

(D) Any analyses required under this section must be completed, and any mitigation requirements necessary for a finding of conformity must be identified in compliance with section (10), before the determination of conformity is made.

(9) Procedures for Conformity Determinations of General Federal Actions.

(A) The analyses required under this rule must be based on the latest planning assumptions.

1. All planning assumptions (including, but not limited to, per capita water and sewer use, vehicle miles traveled per capita or per household, trip generation per household, vehicle occupancy, household size, vehicle fleet mix, vehicle ownership, wood stoves per household, and the geographic distribution of population growth) must be derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO. The conformity determination must also be based on the latest assumptions about current and future background concentrations and other federal actions.

2. Any revisions to these estimates used as part of the conformity determination, including projected shifts in geographic location or level of population, employment, travel, and congestion, must be approved by the MPO or other agency authorized to make such estimates for the area.

(B) The analyses required under this rule must be based on the latest and most accurate emission estimation techniques available as described below, unless such techniques are inappropriate. If such techniques are inappropriate and written approval of the EPA regional administrator is obtained for any modification or substitution, they may be modified or another technique substituted on a case-by-case basis or, where appropriate, on a generic basis for a specific federal agency program.

1. For motor vehicle emissions, the most current version of the motor vehicle emissions model specified by EPA for use in the preparation or revision of implementation plans in

the state or area must be used for the conformity analysis as specified below:

A. The EPA must publish in the Federal Register a notice of availability of any new motor vehicle emissions model; and

B. A grace period of three (3) months shall apply during which the motor vehicle emissions model previously specified by EPA as the most current version may be used. Conformity analyses for which the analysis was begun during the grace period or no more than three (3) years before the Federal Register notice of availability of the latest emission model may continue to use the previous version of the model specified by EPA.

2. For nonmotor vehicle sources, including stationary and area source emissions, the latest emission factors specified by EPA in the "Compilation of Air Pollutant Emission Factors (AP-42)" must be used for the conformity analysis unless more accurate emission data are available, such as actual stack test data from stationary sources which are part of the conformity analysis.

(C) The air quality modeling analyses required under this rule must be based on the applicable air quality models, databases, and other requirements specified in the most recent version of the "Guideline on Air Quality Models (Revised)" (1986), including supplements (EPA publication no. 450/2-78-027R), unless—

1. The guideline techniques are inappropriate, in which case the model may be modified or another model substituted on a case-by-case basis or, where appropriate, on a generic basis for a specific federal agency program; and

2. Written approval of the EPA regional administrator is obtained for any modification or substitution.

(D) The analyses required under this rule must be based on the total of direct and indirect emissions from the action and must reflect emission scenarios that are expected to occur under each of the following cases:

1. The CAA mandated attainment year or, if applicable, the farthest year for which emissions are projected in the maintenance plan;

2. The year during which the total of direct and indirect emissions from the action for each pollutant analyzed is expected to be the greatest on an annual basis; and

3. Any year for which the applicable implementation plan specifies an emissions budget.

(10) Mitigation of Air Quality Impacts.

(A) Any measures that are intended to mitigate air quality impacts must be identified (including the identification and quantification of all emission reductions claimed) and the process for implementation (including any necessary funding of such measures and tracking of such emission reductions) and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation.

(B) Prior to determining that a federal action is in conformity, the federal agency making the conformity determination must obtain written commitments from the appropriate persons or agencies to implement any mitigation measures which are identified as conditions for making conformity determinations. Such written commitment shall describe such mitigation measures and the nature of the commitment, in a manner consistent with subsection (10)(A) of this rule.

(C) Persons or agencies voluntarily committing to mitigation measures to facilitate positive conformity determinations must comply with the obligations of such commitments.

(D) In instances where the federal agency is licensing, permitting or otherwise approving the action of another governmental or private entity, approval by the federal agency must be conditioned on the other entity meeting the mitigation measures set forth in the conformity determination, as provided in subsection (10)(A) of this rule.

(E) When necessary because of changed circumstances, mitigation measures may be modified so long as the new mitigation measures continue to support the conformity determination in accordance with sections (8) and (9) and this section. Any proposed change in the mitigation measures is subject to the reporting requirements of section (5) and the public participation requirements of section (6).

(F) Written commitments to mitigation measures must be obtained prior to a positive conformity determination and such commitments must be fulfilled.

(G) After this rule is approved by EPA as an implementation plan revision, any agreements, including mitigation measures, necessary for a conformity determination will be both state and federally enforceable. Enforceability through the applicable implementation plan will apply to all persons who agree to mitigate direct and indirect emissions associated with a federal action for a conformity determination.

(11) Savings Provision. The federal conformity rules under 40 CFR part 51 subpart W, in addition to any existing applicable state requirements, establish the conformity criteria and procedures necessary to meet the requirements of Clean Air Act section 176(c) until such time as this rule is approved by EPA as an implementation plan revision. Following EPA approval of this rule as a revision to the applicable implementation plan (or a portion thereof), the approved (or approved portion of the) state criteria and procedures will govern conformity determinations and the federal conformity regulations contained in 40 CFR part 93 will apply only for the portion, if any, of the state's conformity provisions that is not approved by EPA. In addition, any previously applicable implementation plan requirements relating to conformity remain enforceable until the state revises its applicable implementation plan to specifically remove them and that revision is approved by EPA.]

(1) Applicability.

(A) Conformity determinations for federal actions related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.) must meet the procedures and criteria of 10 CSR 10-2.390 and 10 CSR 10-5.480 in lieu of the procedures set forth in this rule.

(B) For federal actions not covered by subsection (1)(A) of this rule, a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a federal action would equal or exceed any of the rates in paragraph (1)(B)1. or paragraph (1)(B)2. of this rule.

1. For purposes of subsection (1)(B) of this rule, the following rates apply in nonattainment areas (NAAs):

	Tons/Year
Ozone (VOC or NO_x):	
Serious NAAs	50
Severe NAAs	25
Extreme NAAs	10
Other ozone NAAs outside an ozone transport region	100
Other ozone NAAs inside an ozone transport region:	
VOC	50
NO_x	100
Carbon monoxide: All NAAs	100
SO_2 or NO_2: All NAAs	100
PM_{10}:	
Moderate NAAs	100
Serious NAAs	70
$PM_{2.5}$:	
Direct emissions	100
SO_2	100
NO_x (unless determined not to be significant precursor)	100
VOC or ammonia (if determined to be significant precursors)	100
Pb: All NAAs	25

2. For purposes of subsection (1)(B) of this rule, the following rates apply in maintenance areas:

	Tons/Year
Ozone (NO_x, SO_2, or NO_2):	
All Maintenance Areas	100
Ozone (VOCs):	
Maintenance areas inside an ozone transport region	50
Maintenance areas outside an ozone transport region	100
Carbon monoxide: All Maintenance Areas	100
PM_{10}: All Maintenance Areas	100
$PM_{2.5}$:	
Direct emissions	100
SO_2	100
NO_x (unless determined not to be significant precursor)	100
VOC or ammonia (if determined to be significant precursors)	100
Pb: All Maintenance Areas	25

(C) The requirements of this rule shall not apply to the following federal actions—

1. Actions where the total of direct and indirect emissions are below the emissions levels specified in subsection (1)(B) of this rule;

2. The following actions which would result in no emissions increase or an increase in emissions that is clearly *de minimis*:

A. Judicial and legislative proceedings;

B. Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted;

C. Rulemaking and policy development and issuance;

D. Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities;

E. Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law enforcement personnel;

F. Administrative actions such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties, and fees;

G. Routine, recurring transportation of material and personnel;

H. Routine movement of mobile assets, such as ships and aircraft, in-home port reassignments, and stations (when no new support facilities or personnel are required) to perform as operational groups or for repair or overhaul;

I. Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site;

J. Actions with respect to existing structures, properties, facilities, and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands; actions such as relocation of personnel, disposition of federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency;

K. Granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted;

L. Planning, studies, and provision of technical assistance;

M. Routine operation of facilities, mobile assets, and equipment;

N. Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer;

O. Designation of empowerment zones, enterprise communities, or viticultural areas;

P. Actions by any of the federal banking agencies or the federal reserve banks, including actions regarding charters, applications, notices, licenses, the supervision or examination of depository institutions or depository institution holding companies, access to the discount window, or the provision of financial services to banking organizations or to any department, agency, or instrumentality of the United States;

Q. Actions by the Board of Governors of the Federal Reserve System or any federal reserve bank to effect monetary or exchange rate policy;

R. Actions that implement a foreign-affairs function of the United States;

S. Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and where the federal agency does not retain continuing authority to control emissions associated with the lands, facilities, title, or real properties;

T. Transfers of real property, including land, facilities, and related personal property from a federal entity to another federal entity and assignments of real property, including land, facilities, and related personal property from a federal entity to another federal entity for subsequent deeding to eligible applicants;

U. Actions by the Department of the Treasury to effect fiscal policy and to exercise the borrowing authority of the United States; and

V. Air traffic control activities and adopting approach, departure, and enroute procedures for aircraft operations above the mixing height specified in the applicable State Implementation Plan (SIP) or Tribal Implementation Plan (TIP). Where the applicable SIP or TIP does not specify a mixing height, the federal agency can use the three thousand feet

(3,000') above ground level as a default mixing height, unless the agency demonstrates that use of a different mixing height is appropriate because the change in emissions at and above that height caused by the federal action is *de minimis*;

3. Actions where the emissions are not reasonably foreseeable, such as the following:

A. Initial Outer Continental Shelf lease sales which are made on a broad scale and are followed by exploration and development plans on a project level; and

B. Electric power marketing activities that involve the acquisition, sale, and transmission of electric energy; and

4. Actions which implement a decision to conduct or carry out a program that has been found to conform to the applicable implementation plan, such as prescribed burning actions which are consistent with a land management plan that has been found to conform to the applicable implementation plan.

(D) Notwithstanding the other requirements of this rule, a conformity determination is not required for the following federal actions (or portion thereof):

1. The portion of an action that includes major or minor new or modified stationary sources that require a permit under the new source review (NSR) program (section 110 (a)(2)(c) and section 173 of the Clean Air Act (CAA)) or the prevention of significant deterioration (PSD) program (Title I, part C of the CAA);

2. Actions in response to emergencies which are typically commenced on the order of hours or days after the emergency or disaster and, if applicable, which meet the requirements of subsection (1)(E) of this rule;

3. Research, investigations, studies, demonstrations, or training other than those exempted under paragraph (1)(C)2. of this rule, where no environmental detriment is incurred or the particular action furthers air quality research, as determined by the department;

4. Alteration and additions of existing structures as specifically required by new or existing applicable environmental legislation or environmental regulations (for example, hush houses for aircraft engines and scrubbers for air emissions); and

5. Direct emissions from remedial and removal actions carried out under CERCLA and associated regulations to the extent such emissions either comply with the substantive requirements of the PSD/NSR permitting program or are exempted from other environmental regulation under the provisions of CERCLA and applicable regulations issued under CERCLA.

(E) Federal actions which are part of a continuing response to an emergency or disaster under paragraph (1)(D)2. of this rule and which are to be taken more than six (6) months after the commencement of the response to the emergency or disaster under paragraph (1)(D)2. of this rule are exempt from the requirements of this rule only if—

1. The federal agency taking the actions makes a written determination that, for a specified period not to exceed an additional six (6) months, it is impractical to prepare the conformity analyses which would otherwise be required and the actions cannot be delayed due to overriding concerns for public health and welfare, national security interests, and foreign policy commitments; or

2. For actions which are to be taken after those actions covered by paragraph (1)(E)1. of this rule, the federal agency makes a new determination as provided in paragraph (1)(E)1. of this rule and—

A. Provides a draft copy of the written determinations required to affected U.S. Environmental Protection Agency (EPA) regional office(s), the affected state(s) and/or air pollution control agencies, and any federal recognized Indian tribal government in the nonattainment or maintenance area. Those organizations must be allowed fifteen (15) days from the beginning of the extension period to comment on the draft determination; and

B. Within thirty (30) days after making the determination, publishes a notice of the determination by placing a prominent advertisement in a daily newspaper of general circulation in the area affected by the action; and

3. If additional actions are necessary in response to an emergency or disaster under paragraph (1)(D)2. of this rule beyond the specified time period in paragraph (1)(E)2. of this rule, a federal agency can make a new written determination as described in paragraph (1)(E)2. of this rule for as many six (6)-month periods as needed, but in no case shall this exemption extend beyond three (3) six (6)-month periods except where an agency provides information to EPA and the state or tribe stating that the conditions that gave rise to the emergency exemption continue to exist and how such conditions effectively prevent the agency from conducting a conformity evaluation.

(F) Notwithstanding other requirements of this rule, actions specified by individual federal agencies that have met the criteria set forth in paragraphs (1)(G)1. through (1)(G)3. of this rule and the procedures set forth in subsection (1)(H) of this rule are presumed to conform, except as provided in subsection (1)(J) of this rule. Actions specified by individual federal agencies as presumed to conform may not be used in combination with one another when the total direct and indirect emissions from the combination of actions would equal or exceed any of the rates specified in paragraph (1)(B)1. or (1)(B)2. of this rule.

(G) The federal agency must meet the criteria for establishing activities that are presumed to conform by fulfilling the requirements set forth in paragraphs (1)(G)1. through (1)(G)3. of this rule.

1. The federal agency must clearly demonstrate using methods consistent with this rule that the total of direct and indirect emissions from the type of activities which would be presumed to conform would not—

A. Cause or contribute to any new violation of any standard in any area;

B. Interfere with provisions in the applicable implementation plan for maintenance of any standard;

C. Increase the frequency or severity of any existing violation of any standard in any area; or

D. Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including, where applicable, emission levels specified in the applicable implementation plan for purposes of—

(I) A demonstration of reasonable further progress;

(II) A demonstration of attainment; or

(III) A maintenance plan.

2. The federal agency must provide documentation that the total of direct and indirect emissions from such future actions would be below the emission rates for a conformity determination that are established in subsection (1)(B) of this rule, based, for example, on similar actions taken over recent years.

3. The federal agency must clearly demonstrate that the emissions from the type or category of actions and the amount of emissions from the action are included in the applicable SIP and the state, local, or tribal air quality agencies responsible for the SIP(s) or TIP(s) provide written concurrence that the emissions from the actions along with all other expected emissions in the area will not exceed the emission budget in the SIP.

(H) In addition to meeting the criteria for establishing exemptions set forth in paragraphs (1)(G)1. through (1)(G)3. of this rule, the following procedures must also be complied with to presume that activities will conform:

1. The federal agency must identify through publication in the *Federal Register* its list of proposed activities that are presumed to conform and the basis for the presumptions. The notice must clearly identify the type and size of the action that would be presumed to conform and provide criteria for determining if the type and size of action qualifies it for the presumption;

2. The federal agency must notify the appropriate EPA regional office(s), state, local, and tribal air quality agencies and, where applicable, the agency designated under section 174 of the CAA and the Metropolitan Planning Organization (MPO) and provide at least thirty (30) days for the public to comment on the list of proposed activities presumed to conform. If the presumed-to-conform action has regional or national application (e.g., the action will cause emission increases in excess of the *de minimis* levels identified in subsection (1)(B) of this rule in more than one (1) of EPA's regions), the federal agency, as an alternative to sending it to EPA regional offices, can send the draft conformity determination to U.S. EPA, Office of Air Quality Planning and Standards;

3. The federal agency must document its responses to all the comments received and make the comments, responses, and final list of activities available to the public upon request; and

4. The federal agency must publish the final list of such activities in the *Federal Register*.

(I) Emissions from the following actions are presumed to conform:

1. Actions at installations with facility-wide emission budgets meeting the requirements in subsection (3)(H) of this rule provided that the state or tribe has included the emission budget in the EPA-approved SIP and the emissions from the action along with all other emissions from the installation will not exceed the facility-wide emission budget;

2. Prescribed fires conducted in accordance with a smoke management program which meets the requirements of EPA's Interim Air Quality Policy on Wildland and Prescribed Fires or an equivalent replacement EPA policy; and

3. Actions that the state or tribe identifies in the EPA-approved SIP or TIP as presumed to conform.

(J) Even though an action would otherwise be presumed to conform under subsection (1)(F) or (1)(I) of this rule, an action shall not be presumed to conform and the requirements of section (4), subsection (1)(L), subsections (3)(A) through (3)(G), and subsections (3)(I) through (3)(K) of this rule shall apply to the action if EPA or a third party shows that the action would—

1. Cause or contribute to any new violation of any standard in any area;

2. Interfere with provisions in the applicable SIP or TIP for maintenance of any standard;

3. Increase the frequency or severity of any existing violation of any standard in any area; or

4. Delay timely attainment of any standard or any required interim emissions reductions or other milestones in any area including, where applicable, emission levels specified in the applicable SIP or TIP for purposes of—

A. A demonstration of reasonable further progress;

B. A demonstration of attainment; or

C. A maintenance plan.

(K) The provisions of this rule shall apply in all nonattainment and maintenance areas except conformity requirements for newly-designated nonattainment areas are not applicable until one (1) year after the effective date of the final nonattainment designation for each National Ambient Air Quality Standards (NAAQS) and pollutant in accordance with section 176(c)(6) of the Act.

(L) State Implementation Plan Revision. The federal conformity rules under 40 CFR 51, Subpart W and 40 CFR 93, Subpart B, in addition to any existing applicable state requirements, establish the conformity criteria and procedures necessary to meet the requirements of Clean Air Act section 176(c) until such time as this rule is approved by EPA as an implementation plan revision. Following EPA approval of this rule as a revision to the applicable implementation plan (or a portion thereof), the approved (or approved portion of the) state criteria and procedures will govern conformity determinations and the federal conformity regulations contained in 40 CFR 93 will apply only for the portion, if any, of the state's conformity provisions that is not approved by EPA. In addition, any previously-applicable implementation plan requirements relating to conformity remain enforceable until the state revises its applicable implementation plan to specifically remove them and that revision is approved by EPA.

(2) Definitions. Terms used in this rule shall have the meaning given to them by the CAA, EPA regulations, and 10 CSR 10-6.020, in that order of priority.

(3) General Provisions.

(A) Prohibition.

1. No department, agency, or instrumentality of the federal government shall engage in, support in any way, or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan.

2. A federal agency must make a determination that a federal action conforms to the applicable implementation plan in accordance with the requirements of this rule before the action is taken.

3. Notwithstanding any provision of this rule, a determination that an action is in conformity with the applicable implementation plan does not exempt the action from any other requirements of the applicable implementation plan, the National Environmental Policy Act (NEPA), or the CAA.

4. If an action would result in emissions originating in more than one (1) nonattainment or maintenance area, the conformity must be evaluated for each area separately.

(B) Federal Agency Conformity Responsibility. Any department, agency, or instrumentality of the federal government taking an action subject to this rule must make its own conformity determination consistent with the requirements of this rule. In making its conformity determination, a federal agency must follow the requirements in section (4), subsections (3)(C) through (3)(G), and subsections (3)(I) through (3)(L) of this rule and must consider comments from any interested parties. Where multiple federal agencies have jurisdiction for various aspects of a project, a federal agency may choose to adopt the analysis of another federal agency or develop its own analysis in order to make its conformity determination.

(C) Public Participation.

1. Upon request by any person regarding a specific federal action, a federal agency must make available, subject to the limitation in paragraph (3)(C)5. of this rule, for review its draft conformity determination under subsection (3)(B) of this rule with supporting materials which describe the analytical methods and conclusions relied upon in making the applicability analysis and draft conformity determination.

2. A federal agency must make public its draft conformity determination under subsection (3)(B) of this rule by placing a notice by prominent advertisement in a daily newspaper of general circulation in the areas affected by the action and by providing thirty (30) days for written public comment prior to taking any formal action on the draft determination. This comment period may be concurrent with any other public involvement, such as occurs in the NEPA process. If the action has multi-regional or national impacts (e.g., the action will cause emission increases in excess of the *de minimis* levels identified in subsection (1)(B) of this rule in three (3) or more of EPA's regions), the federal agency, as an alternative to publishing separate notices, can publish a notice in the *Federal Register*.

3. A federal agency must document its response to all the comments received on its draft conformity determination under subsection (3)(B) of this rule and make the comments and responses available, subject to the limitation in paragraph (3)(C)5. of this rule, upon request by any person regarding a specific federal

action, within thirty (30) days of the final conformity determination.

4. A federal agency must make public its final conformity determination under subsection (3)(B) of this rule for a federal action by placing a notice by prominent advertisement in a daily newspaper of general circulation in the areas affected by the action within thirty (30) days of the final conformity determination. If the action would have multi-regional or national impacts, the federal agency, as an alternative, can publish the notice in the *Federal Register*.

5. The draft and final conformity determination shall exclude any restricted information or confidential business information. The disclosure of restricted information and confidential business information shall be controlled by the applicable laws, regulations, or executive orders concerning the release of such materials.

(D) Re-evaluation of Conformity.

1. Once a conformity determination is completed by a federal agency, that determination is not required to be re-evaluated if the agency has maintained a continuous program to implement the action; the determination has not lapsed as specified in paragraph (3)(D)2. of this rule; or any modification to the action does not result in an increase in emissions above the levels as specified in subsection (1)(B) of this rule. If a conformity determination is not required for the action at the time NEPA analysis is completed, the date of the finding of no significant impact (FONSI) for an Environmental Assessment, a record of decision (ROD) for an Environmental Impact Statement, or a categorical exclusion determination can be used as a substitute date for the conformity determination date.

2. The conformity status of a federal action automatically lapses five (5) years from the date a final conformity determination is reported under section (4) of this rule, unless the federal action has been completed or a continuous program to implement the federal action has commenced.

3. Ongoing federal activities at a given site showing continuous progress are not new actions and do not require periodic redeterminations so long as such activities are within the scope of the final conformity determination reported under section (4) of this rule.

4. If the federal agency originally determined through the applicability analysis that a conformity determination was not necessary because the emissions for the action were below the limits in subsection (1)(B) of this rule and changes to the action would result in the total emissions from the action being above the limits in subsection (1)(B) of this rule, then the federal agency must make a conformity determination.

(E) Criteria for Determining Conformity of General Federal Actions.

1. An action required under section (1) of this rule, to have a conformity determination for a specific pollutant, will be determined to conform to the applicable implementation plan if, for each pollutant that exceeds the rates in subsection (1)(B) of this rule, or otherwise requires a conformity determination due to the total of direct and indirect emissions from the action, the action meets the requirements of paragraph (3)(E)3. of this rule, and meets any of the following requirements:

A. For any criteria pollutant or precursor, the total of direct and indirect emissions from the action are specifically identified and accounted for in the applicable SIP attainment or maintenance demonstration or reasonable further progress milestone or in a facility-wide emission budget included in a SIP in accordance with subsection (3)(H) of this rule;

B. For precursors of ozone, nitrogen dioxide, or particulate matter (PM), the total of direct and indirect emissions from the action are fully offset within the same nonattainment or maintenance area (or nearby area of equal or higher classification provided the emissions from that area contribute to the violations, or have contributed to violations in the past, in the area with the federal action) through a revision to the applicable SIP or a similarly-enforceable measure that effects emission reductions so that there is no net increase in emissions of that pollutant;

C. For any directly-emitted criteria pollutant, the total of direct and indirect emissions from the action meet the requirements—

(I) Specified in paragraph (3)(E)2. of this rule, based on area-wide air quality modeling analysis and local air quality modeling analysis; or

(II) Specified in subparagraph (3)(E)1.E. of this rule and, for local air quality modeling analysis, the requirement of paragraph (3)(E)2. of this rule;

D. For carbon monoxide or directly emitted PM—

(I) Where the department determines that an area-wide air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in paragraph (3)(E)2. of this rule, based on local air quality modeling analysis; or

(II) Where the department determines that an area-wide air quality modeling analysis is appropriate and that a local air quality modeling analysis is not needed, the total of direct and indirect emissions from the action meet the requirements specified in paragraph (3)(E)2. of this rule, based on area-wide modeling, or meet the requirements of subparagraph (3)(E)1.E. of this rule; or

E. For ozone or nitrogen dioxide, and for purposes of parts (3)(E)1.C.(II) and (3)(E)1.D.(II) of this rule, each portion of the action or the action as a whole meets any of the following requirements:

(I) Where EPA has approved a revision to the applicable implementation plan after the area was designated as nonattainment and the state or tribe makes a determination as provided in subpart (3)(E)1.E.(I)(a) of this rule or where the state or tribe makes a commitment as provided in subpart (3)(E)1.E.(I)(b) of this rule.

(a) The total of direct and indirect emissions from the action (or portion thereof) is determined and documented by the department to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would not exceed the emissions budgets specified in the applicable SIP.

(b) The total of direct and indirect emissions from the action (or portion thereof) is determined by the department to result in a level of emissions which, together with all other emissions in the nonattainment (or maintenance) area, would exceed an emissions budget specified in the applicable implementation plan and the department makes a written commitment to EPA which includes the following:

I. A specific schedule for adoption and submittal of a revision to the applicable implementation plan which would achieve the needed emission reductions prior to the time emissions from the federal action would occur;

II. Identification of specific measures for incorporation into the applicable implementation plan which would result in a level of emissions which, together with all other emissions in the nonattainment or maintenance area, would not exceed any emissions budget specified in the applicable implementation plan;

III. A demonstration that all existing applicable implementation plan requirements are being implemented in the area for the pollutants affected by the federal action, and that local authority to implement additional requirements has been fully pursued;

IV. A determination that the responsible federal agencies have required all reasonable mitigation measures associated with their action; and

V. Written documentation including all air quality analyses supporting the conformity determination.

(c) Where a federal agency made a conformity determination based on a state's or tribe's commitment under subpart (3)(E)1.E.(I)(b) of this rule and the state has submitted a SIP or TIP to EPA covering the time period during which the emissions will occur or is scheduled to submit such a SIP or TIP within eighteen (18) months of the conformity determination, the state commitment is automatically deemed a call for a SIP or TIP revision by EPA under section 110(k)(5) of the CAA, effective on the date of the federal conformity determination and requiring response within eighteen (18) months or any shorter time within which the state or tribe commits to revise the applicable SIP;

(d) Where a federal agency made a conformity determination based on a state or tribal commitment under subpart (3)(E)1.E.(I)(b) of this rule and the state or tribe has not submitted a SIP covering the time period when the emissions will occur or is not scheduled to submit such a SIP within eighteen (18) months of the conformity determination, the state or tribe must, within eighteen (18) months, submit to EPA a revision to the existing SIP committing to include the emissions in the future SIP revision;

(II) The action (or portion thereof), as determined by the MPO, is specifically included in a current transportation plan and transportation improvement program which have been found to conform to the applicable implementation plan under 10 CSR 10-2.390 or 10 CSR 10-5.480;

(III) The action (or portion thereof) fully offsets its emissions within the same nonattainment or maintenance area (or nearby area of equal or higher classification provided the emissions from that area contribute to the violations, or have contributed to violations in the past, in the area with the federal action) through a revision to the applicable SIP or an equally-enforceable measure that effects emission reductions equal to or greater than the total of direct and indirect emissions from the action so that there is no net increase in emissions of that pollutant;

(IV) Where EPA has not approved a revision to the relevant SIP since the area was designated or reclassified, the total of direct and indirect emissions from the action for the future years (described in paragraph (3)(F)4. of this rule) do not increase emissions with respect to the baseline emissions, and—

(a) The baseline emissions reflect the historical activity levels that occurred in the geographic area affected by the proposed federal action during—

I. The most current calendar year with a complete emission inventory available before an area is designated unless EPA sets another year;

II. The emission budget in the applicable SIP; or

III. The year of the baseline inventory in the PM_{10} applicable SIP; and

(b) The baseline emissions are the total of direct and indirect emissions calculated for the future years (described in paragraph (3)(F)4. of this rule) using the historic activity levels (described in subpart (3)(E)1.E.(IV)(a) of this rule) and appropriate emission factors for the future years; or

(V) Where the action involves regional water or wastewater projects, such projects are sized to meet only the needs of population projections that are in the applicable SIP.

2. The area-wide and local air quality modeling analyses must—

A. Meet the requirements in subsection (3)(F) of this rule; and

B. Show that the action does not—

(I) Cause or contribute to any new violation of any standard in any area; or

(II) Increase the frequency or severity of any existing violation of any standard in any area.

3. Notwithstanding any other requirements of this section, an action subject to this rule may not be determined to conform to the applicable implementation plan unless the total of direct and indirect emissions from the action is in compliance or consistent with all relevant requirements and milestones contained in the applicable implementation plan, such as elements identified as part of the reasonable further progress schedules, assumptions specified in the attainment or maintenance demonstration, prohibitions, numerical emission limits, and work practice requirements, and such action is otherwise in compliance with all relevant requirements of the applicable implementation plan.

4. Any analyses required under this section must be completed, and any mitigation requirements necessary for a finding of conformity must be identified before the determination of conformity is made.

(F) Procedures for Conformity Determinations of General Federal Actions.

1. The analyses required under this rule must be based on the latest planning assumptions.

A. All planning assumptions must be derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO or other agency authorized to make such estimates, where available.

B. Any revisions to these estimates used as part of the conformity determination, including projected shifts in geographic location or level of population, employment, travel, and congestion, must be approved by the MPO or other agency authorized to make such estimates for the area.

2. The analyses required under this rule must be based on the latest and most accurate emission estimation techniques available as described below, unless such techniques are inappropriate, the federal agency may obtain written approval from the appropriate EPA regional administrator for a modification or substitution, of another technique on a case-by-case basis or, where appropriate, on a generic basis for a specific federal agency program.

A. For motor vehicle emissions, the most current version of the motor vehicle emissions model specified by EPA and made available for use in the preparation or revision of SIPs in the state must be used for the conformity analysis as specified below—

(I) The EPA must publish in the *Federal Register* a notice of availability of any new motor vehicle emissions model; and

(II) A grace period of three (3) months shall apply during which the motor vehicle emissions model previously specified by EPA as the most current version may be used unless EPA announces a longer grace period in the *Federal Register*. Conformity analyses for which the analysis was begun during the grace period or no more than three (3) years before the *Federal Register* notice of availability of the latest emission model may continue to use the previous version of the model specified by EPA.

B. For non-motor vehicle sources, including stationary and area source emissions, the latest emission factors specified by EPA in the "Compilation of Air Pollutant Emission Factors" (AP-42, http://www.epa.gov/ttn/chiefs/efpac) must be used for the conformity analysis unless more accurate emission data are available, such as actual stack test data from stationary sources which are part of the conformity analysis.

3. The air quality modeling analyses required under this rule must be based on the applicable air quality models, databases, and other requirements specified in the most recent version of the "Guideline on Air Quality Models" (40 CFR 51, Appendix W), unless—

A. The guideline techniques are inappropriate, in which case the model may be modified or another model substituted on a case-by-case basis or, where appropriate, on a generic basis for a specific federal agency program; and

B. Written approval of the EPA regional administrator is obtained for any modification or substitution.

4. The analyses required under this rule must be based on the total of direct and indirect emissions from the action and must reflect emission scenarios that are expected to occur under each of the following cases:

A. The attainment year specified in the SIP or, if the SIP does not specify an attainment year, the latest attainment year possible under the Act;

B. The last year for which emissions are projected in the maintenance plan;

C. The year during which the total of direct and indirect emissions from the action is expected to be the greatest on an annual basis; and

D. Any year for which the applicable SIP specifies an emissions budget.

(G) Mitigation of Air Quality Impacts.

1. Any measures that are intended to mitigate air quality impacts must be identified (including the identification and quantification of all emission reductions claimed) and the process for implementation (including any necessary funding of such measures and tracking of such emission reductions) and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation.

2. Prior to determining that a federal action is in conformity, the federal agency making the conformity determination must obtain written commitments from the appropriate persons or agencies to implement any mitigation measures which are identified as conditions for making conformity determinations.

3. Persons or agencies voluntarily committing to mitigation measures to facilitate positive conformity determinations must comply with the obligations of such commitments.

4. In instances where the federal agency is licensing, permitting, or otherwise approving the action of another governmental or private entity, approval by the federal agency must be conditioned on the other entity meeting the mitigation measures set forth in the conformity determination.

5. When necessary because of changed circumstances, mitigation measures may be modified so long as the new mitigation measures continue to support the conformity determination. Any proposed change in the mitigation measures is subject to the reporting requirements of section (4) of this rule and the public participation requirements of subsection (3)(C) of this rule.

6. Written commitments to mitigation measures must be obtained prior to a positive conformity determination and such commitments must be fulfilled.

7. After a state or tribe revises its SIP or TIP and EPA approves that SIP revision, any agreements, including mitigation measures, necessary for a conformity determination will be both state or tribal and federally enforceable. Enforceability through the applicable SIP or TIP will apply to all persons who agree to mitigate direct and indirect emissions associated with a federal action for a conformity determination.

(H) Conformity Evaluation for Federal Installations with Facility-Wide Emission Budgets.

1. The state, local, or tribal agency responsible for implementing and enforcing the SIP or TIP can, in cooperation with federal agencies or third parties authorized by the agency that operate installations subject to federal oversight, develop and adopt a facility-wide emission budget to be used for demonstrating conformity under subparagraph (3)(E)1.A. of this rule. The facility-wide budget must meet the following criteria:

A. Be for a set time period;

B. Cover the pollutants or precursors of the pollutants for which the area is designated nonattainment or maintenance;

C. Include specific quantities allowed to be emitted on an annual or seasonal basis;

D. The emissions from the facility along with all other emissions in the area will not exceed the emission budget for the area;

E. Include specific measures to ensure compliance with the budget, such as periodic reporting requirements or compliance demonstration, when the federal agency is taking an action that would otherwise require a conformity determination;

F. Be submitted to EPA as a SIP revision; and

G. The SIP revision must be approved by EPA.

2. The facility-wide budget developed and adopted in accordance with paragraph (3)(H)1. of this rule can be revised by following the requirements in paragraph (3)(H)1. of this rule.

3. Total direct and indirect emissions from federal actions in conjunction with all other emissions subject to general conformity from the facility that do not exceed the facility budget adopted pursuant to paragraph (3)(H)1. of this rule are "presumed to conform" to the SIP and do not require a conformity analysis.

4. If the total direct and indirect emissions from the federal actions in conjunction with the other emissions subject to general conformity from the facility exceed the budget adopted pursuant to paragraph (3)(H)1. of this rule, the action must be evaluated for conformity. A federal agency can use the compliance with the facility-wide emissions budget as part of the demonstration of conformity, i.e., the agency would have to mitigate or offset the emissions that exceed the emission budget.

5. If the SIP for the area includes a category for construction emissions, the negotiated budget can exempt construction emissions from further conformity analysis.

(I) Emissions Beyond the Time Period Covered by the SIP. If a federal action would result in total direct and indirect emissions above the applicable thresholds which would be emitted beyond the time period covered by the SIP, the federal agency can—

1. Demonstrate conformity with the last emission budget in the SIP; or

2. Request the state or tribe to adopt an emissions budget for the action for inclusion in the SIP. The state or tribe must submit a SIP or TIP revision to EPA within eighteen (18) months either including the emissions in the existing SIP or establishing an enforceable commitment to include the emissions in future SIP revisions based on the latest planning assumptions at the time of the SIP revision. No such commitment by a state or tribe shall restrict a state's or tribe's ability to require Reasonably Available Control Technology (RACT), Reasonably Available Control Measures (RACM), or any other control measures within the state's or tribe's authority to ensure timely attainment of the NAAQS.

(J) Timing of Offsets and Mitigation Measures.

1. The emissions reductions from an offset or mitigation measure used to demonstrate conformity must occur during the same calendar year as the emission increases from the action except as provided in paragraph (3)(J)2. of this rule.

2. The state or tribe may approve emissions reductions in other years provided—

A. The reductions are greater than the emission increases by the following ratios:

(I) Extreme nonattainment areas	**1.5:1**
(II) Severe nonattainment areas	**1.3:1**
(III) Serious nonattainment areas	**1.2:1**
(IV) Moderate nonattainment areas	**1.15:1**
(V) All other areas	**1.1:1**

B. The time period for completing the emissions reductions must not exceed twice the period of the emissions; and

C. The offset or mitigation measure with emissions reductions in another year will not—

(I) Cause or contribute to a new violation of any air quality standard;

(II) Increase the frequency or severity of any existing violation of any air quality standard; or

(III) Delay the timely attainment of any standard or any interim emissions reductions or other milestones in any area.

3. The approval by the state or tribe of an offset or mitigation measure with emissions reductions in another year does not relieve the state or tribe of any obligation to meet any SIP or CAA milestone or deadline. The approval of an alternate schedule for mitigation measures is at the discretion of the state or tribe, and they are not required to approve an alternate schedule.

(K) Inter-Precursor Mitigation Measures and Offsets. Federal agencies must reduce the same type of pollutant as being increased by the federal action except the state or tribe may approve offsets or mitigation measures of different precursors of the same criteria pollutant, if such trades are allowed by a state or tribe in a SIP- or TIP-approved NSR regulation, is technically justified, and has a demonstrated environmental benefit.

(L) Early Emission Reduction Credit Programs at Federal Facilities and Installations Subject to Federal Oversight.

1. Federal facilities and installations subject to federal oversight can, with the approval of the state or tribal agency responsible for the SIP or TIP in that area, create an early emissions reductions credit program. The federal agency can create the emission reduction credits in accordance with the requirements in paragraph (3)(L)2. of this rule and can use them in accordance with paragraph (3)(L)3. of this rule.

2. Creation of emission reduction credits.

A. Emissions reductions must be quantifiable through the use of standard emission factors or measurement techniques. If non-standard factors or techniques to quantify the emissions reductions are used, the federal agency must receive approval from the state or tribal agency responsible for the implementation of the SIP or TIP and from EPA's regional office. The emission reduction credits do not have to be quantified before the reduction strategy is implemented but must be quantified before the credits are used in the general conformity evaluation.

B. The emission reduction methods must be consistent with the applicable SIP or TIP attainment and reasonable further progress demonstrations.

C. The emissions reductions cannot be required by or credited to other applicable SIP or TIP provisions.

D. Both the state or tribe and federal air quality agencies must be able to take legal action to ensure continued implementation of the emission reduction strategy. In addition, private citizens must also be able to initiate action to ensure compliance with the control requirement.

E. The emissions reductions must be permanent or the timeframe for the reductions must be specified.

F. The federal agency must document the emissions reductions and provide a copy of the document to the state or tribal air quality agency and the EPA regional office for review. The documentation must include a detailed description of the emission reduction strategy and a discussion of how it meets the requirements of subparagraphs (3)(L)2.A. through (3)(L)2.E. of this rule.

3. Use of emission reduction credits. The emission reduction credits created in accordance with paragraph (3)(L)2. of this rule can be used, subject to the following limitations, to reduce the emissions increase from a federal action at the facility for the conformity evaluation.

A. If the technique used to create the emission reduction is implemented at the same facility as the federal action and could have occurred in conjunction with the federal action, then the credits can be used to reduce the total direct and indirect emissions used to determine the applicability of the regulation as required in section (1) of this rule and as offsets or mitigation measures required by subsection (3)(E) of this rule.

B. If the technique used to create the emission reduction is not implemented at the same facility as the federal action or could not have occurred in conjunction with the federal action, then the credits cannot be used to reduce the total direct and indirect emissions used to determine the applicability of the regulation as required in section (1) of this rule, but can be used to offset or mitigate the emissions as required by subsection (3)(E) of this rule.

C. Emissions reductions credits must be used in the same year in which they are generated.

D. Once the emission reduction credits are used, they cannot be used as credits for another conformity evaluation. However, unused credits from a strategy used for one (1) conformity evaluation can be used for another conformity evaluation as long as the reduction credits are not double counted.

E. Federal agencies must notify the state or tribal air quality agency responsible for the implementation of the SIP or TIP and EPA Regional Office when the emission reduction credits are being used.

(4) Reporting and Record Keeping.

(A) A federal agency making a conformity determination under section (4), subsections (3)(B) through (3)(G), and subsections (3)(I) through (3)(K) of this rule must provide to the appropriate EPA regional office(s), state and local air quality agencies, any federally-recognized Indian tribal government in the nonattainment or maintenance area, and, where applicable, affected federal land managers, the agency designated under section 174 of the CAA and the MPO, a thirty (30)-day notice which describes the proposed action and the federal agency's draft conformity determination on the action. If the action has multiregional or national impacts (e.g., the action will cause emission increases in excess of the *de minimis* levels identified in subsection (1)(B) of this rule in three (3) or more of EPA's regions), the federal agency, as an alternative to sending it to EPA regional offices, can provide the notice to EPA's Office of Air Quality Planning and Standards.

(B) A federal agency must notify the appropriate EPA regional office(s), state and local air quality agencies, any federally-recognized Indian tribal government in the nonattainment or maintenance area, and, where applicable, affected federal land managers, the agency designated under section 174 of the CAA and the MPO, within thirty (30) days after making a final conformity determination under this rule.

(C) The draft and final conformity determination shall exclude any restricted information or confidential business information. The disclosure of restricted information and confidential business information shall be controlled by the applicable laws, regulations, security manuals, or executive orders concerning the use, access, and release of such materials. Subject to applicable procedures to protect restricted information from public disclosure, any information or materials excluded from the draft or final conformity determination or supporting materials may be made available in a restricted information annex to the determination for review by federal and state representatives who have received appropriate clearances to review the information.

(5) Test Methods. ***(Not Applicable)***

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Oct. 4, 1994, effective May 28, 1995. Amended: Filed Jan. 30, 1996, effective Sept. 30, 1996. Amended: File Feb. 9, 2007, effective Sept. 30, 2007. Amended: Filed Jan. 5, 2011.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., March 31, 2011. The public hearing will be held at Elm Street Conference Center, 1730 East Elm Street, Lower Level, Bennett Springs Conference Room, Jefferson City, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., April 7, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

Title 20—DEPARTMENT OF INSURANCE, FINANCIAL INSTITUTIONS AND PROFESSIONAL REGISTRATION
Division 2200—State Board of Nursing
Chapter 4—General Rules

PROPOSED AMENDMENT

20 CSR 2200-4.010 Fees. The board is proposing to amend subsection (1)(J).

PURPOSE: The State Board of Nursing is statutorily obligated to enforce and administer the provisions of sections 335.011 to 335.355, RSMo. Pursuant to section 335.036, RSMo, the board shall by rule and regulation set the amount of fees authorized by sections 335.011 to 335.355, RSMo, so that the revenue produced is sufficient, but not excessive, to cover the cost and expense to the board for administering the provisions of sections 335.011 to 335.355, RSMo. Based on the board's five (5)-year projections, the board finds it necessary to reduce fees for the upcoming renewal periods for 2011 and 2012.

(1) The following fees are established by the State Board of Nursing:

(J) Biennial Renewal Fee—

1. RN—

A. Effective January 1, 2009	$ 60
B. Effective January 1, 2011, to December 31, 2012	**$ 40**
C. Effective January 1, 2013	**$ 60**

2. LPN—

A. Effective January 1, 2009	$ 52
B. Effective January 1, 2011, to December 31, 2012	**$ 32**
C. Effective January 1, 2013	**$ 52**

3. License renewal for a professional nurse shall be biennial; occurring on odd-numbered years and the license shall expire on April 30 of each odd-numbered year. License renewal for a practical nurse shall be biennial; occurring on even-numbered years and the license shall expire on May 31 of each even-numbered year. Renewal shall be for a twenty-four (24)-month period except in instances when renewal for a greater or lesser number of months is caused by acts or policies of the Missouri State Board of Nursing. Renewal applications (see 20 CSR 2200-4.020) shall be mailed every even-numbered year by the Missouri State Board of Nursing to all LPNs currently licensed and every odd-numbered year to all RNs currently licensed;

4. Renewal fees for each biennial renewal period shall be accepted by the Missouri State Board of Nursing only if accompanied by an appropriately completed renewal application*[.]*; **and**

5. All fees established for licensure or licensure renewal of nurses incorporate an educational surcharge in the amount of one dollar ($1) per year for practical nurses and five dollars ($5) per year for professional nurses. These funds are deposited in the professional and practical nursing student loan and nurse repayment fund;

*AUTHORITY: sections **324.001.10 and** 335.036, RSMo Supp. [2008] **2010** and section 335.046, RSMo 2000. This rule originally filed as 4 CSR 200-4.010. Emergency rule filed Aug. 13, 1981, effective Aug. 23, 1981, expired Dec. 11, 1981. Original rule filed Aug. 13, 1981, effective Nov. 12, 1981. For intervening history, please consult the **Code of State Regulations**. Emergency amendment filed Jan. 4, 2011, effective Jan. 14, 2011, expires July 12, 2011. Amended: Filed Jan. 4, 2011.*

PUBLIC COST: This proposed amendment will result in a decrease of revenue for the State Board of Nursing for approximately $3,226,500 beginning January 1, 2011, and continuing through December 31, 2012. Beginning January 1, 2013, the board's revenue will increase by approximately $3,226,500 biennially for the life of the rule.

PRIVATE COST: This proposed amendment will save private entities approximately $3,226,500 beginning January 1, 2011, and continuing through December 31, 2012. Beginning January 1, 2013, this amendment will cost private entities approximately $3,226,500 biennially for the life of the rule.

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with the State Board of Nursing, Lori Scheidt, Executive Director, PO Box 656, Jefferson City, MO 65102, by fax at (573) 751-0075, or via email at nursing@pr.mo.gov. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*

PUBLIC ENTITY FISCAL NOTE

I. RULE NUMBER

Title 20 -Department of Insurance, Financial Institutions and Professional Registration
Division 2200 - State Board of Nursing
Chapter 4 - General Rules
Proposed Amendment to 20 CSR 2200-4.010 - Fees
Prepared September 20, 2010 by the Division of Professional Registration

II. SUMMARY OF FISCAL IMPACT

Estimated Fiscal Impact Between January 1, 2011 and December 31, 2012

Affected Agency or Political Subdivision	Estimated Loss of Revenue
State Board of Nursing	$3,226,500
Total Loss of Revenue Between January 1, 2011 and December 31, 2012	**$3,226,500**

Estimated Fiscal Impact Effective January 1, 2013

Affected Agency or Political Subdivision	Estimated Increase of Revenue
State Board of Nursing	$3,226,500
Total Increase of Revenue Effective January 1, 2013 and Biennally Thereafter for the Life of the Rule	**$3,226,500**

III. WORKSHEET

See Private Entity Fiscal Note

IV. ASSUMPTION

1. The total loss of revenue is based on the cost savings reflected in the Private Entity Fiscal Note filed with this rule.
2. The board utilizes a rolling five year financial analysis process to evaluate its fund balance, establish fee structure and assess budgetary needs. The five year analysis is based on the projected revenue, expenses and number of licensees. Based on the board's recent five year analysis, the board voted on a $25 reduction in renewal and reinstatement fees beginning on January 1, 2011 and continuing through December 31, 2012.

PRIVATE ENTITY FISCAL NOTE

I. RULE NUMBER

Title 20 -Department of Insurance, Financial Institutions and Professional Registration
Division 2200 - State Board of Nursing
Chapter 4 - General Rules
Proposed Amendment to 20 CSR 2200-4.010 - Fees
Prepared September 20, 2010 by the Division of Professional Registration

II. SUMMARY OF FISCAL IMPACT

Estimated Fiscal Impact Between January 1, 2011 and December 31, 2012

Estimate the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by type of the business entities which would likely be affected:	Estimated cost of compliance with the rule by affected entities:
106,000	RNs and LPNs Eligible for Renewal (Renewal Fee Decrease @ $30)	$3,180,000
1,550	RNs and LPNs Reactivating a License (Renewal Fee Decrease @ $30)	$46,500
	Estimated Cost Savings Between January 1, 2011 and December 31, 2012	**$3,226,500**

Estimated Fiscal Impact Effective January 1, 2013

Estimate the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by type of the business entities which would likely be affected:	Estimated cost of compliance with the rule by affected entities:
106,000	RNs and LPNs Eligible for Renewal (Renewal Fee Increase @ $30)	($3,180,000)
1,550	RNs and LPNs Reactivating a License (Renewal Fee Increase @ $30)	($46,500)
	Estimated Cost of Compliance Effective January 1, 2013 and Biennially for the Life of the Rule	($3,226,500)

III. WORKSHEET

See Table Above

IV. ASSUMPTION

1. The above figures are based on FY09-FY10 actuals.
2. It is anticipated that the total fiscal savings will occur during 2010 and 2011, may vary with inflation and is expected to increase at the rate projected by the Legislative Oversight Committee.

This section will contain the final text of the rules proposed by agencies. The order of rulemaking is required to contain a citation to the legal authority upon which the order of rulemaking is based; reference to the date and page or pages where the notice of proposed rulemaking was published in the *Missouri Register*; an explanation of any change between the text of the rule as contained in the notice of proposed rulemaking and the text of the rule as finally adopted, together with the reason for any such change; and the full text of any section or subsection of the rule as adopted which has been changed from that contained in the notice of proposed rulemaking. The effective date of the rule shall be not less than thirty (30) days after the date of publication of the revision to the *Code of State Regulations*.

The agency is also required to make a brief summary of the general nature and extent of comments submitted in support of or opposition to the proposed rule and a concise summary of the testimony presented at the hearing, if any, held in connection with the rulemaking, together with a concise summary of the agency's findings with respect to the merits of any such testimony or comments which are opposed in whole or in part to the proposed rule. The ninety (90)-day period during which an agency shall file its order of rulemaking for publication in the *Missouri Register* begins either: 1) after the hearing on the proposed rulemaking is held; or 2) at the end of the time for submission of comments to the agency. During this period, the agency shall file with the secretary of state the order of rulemaking, either putting the proposed rule into effect, with or without further changes, or withdrawing the proposed rule.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 140—Division of Energy
Chapter 2—Energy Set-Aside Fund

ORDER OF RULEMAKING

By the authority vested in the Department of Natural Resources under section 640.674, RSMo 2000, the department amends a rule as follows:

10 CSR 140-2.010 Definitions **is amended**.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on November 1, 2010 (35 MoReg 1548–1550). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 140—Division of Energy
Chapter 2—Energy Set-Aside Fund

ORDER OF RULEMAKING

By the authority vested in the Department of Natural Resources under section 640.674, RSMo 2000, the department amends a rule as follows:

10 CSR 140-2.020 General Provisions **is amended**.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on November 1, 2010 (35 MoReg 1550–1553). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 140—Division of Energy
Chapter 2—Energy Set-Aside Fund

ORDER OF RULEMAKING

By the authority vested in the Department of Natural Resources under section 640.674, RSMo 2000, the department rescinds a rule as follows:

10 CSR 140-2.030 Public Sector Eligibility **is rescinded**.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on November 1, 2010 (35 MoReg 1554). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 12—DEPARTMENT OF REVENUE
Division 10—Director of Revenue
Chapter 3—State Sales Tax

ORDER OF RULEMAKING

By the authority vested in the director of revenue under section 144.270, RSMo Supp. 2010, the director rescinds a rule as follows:

12 CSR 10-3.868 Not-for-Profit Civic, Social, Service or Fraternal Organizations—Criteria for Exemption **is rescinded**.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on November 15, 2010 (35 MoReg 1687). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 12—DEPARTMENT OF REVENUE
Division 10—Director of Revenue
Chapter 3—State Sales Tax

ORDER OF RULEMAKING

By the authority vested in the director of revenue under section 144.270, RSMo Supp. 2010, the director rescinds a rule as follows:

12 CSR 10-3.884 Basic Steelmaking Exemption—Sales Tax **is rescinded**.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on November 15, 2010 (35 MoReg 1687). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 12—DEPARTMENT OF REVENUE
Division 10—Director of Revenue
Chapter 3—State Sales Tax

ORDER OF RULEMAKING

By the authority vested in the director of revenue under section 144.270, RSMo Supp. 2010, the director rescinds a rule as follows:

12 CSR 10-3.886 Exemption For Construction Materials Sold to Exempt Entities **is rescinded**.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on November 15, 2010 (35 MoReg 1687). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 12—DEPARTMENT OF REVENUE
Division 10—Director of Revenue
Chapter 3—State Sales Tax

ORDER OF RULEMAKING

By the authority vested in the director of revenue under section 144.270, RSMo Supp. 2010, the director rescinds a rule as follows:

12 CSR 10-3.896 Auctioneers, Brokers and Agents **is rescinded**.

A notice of proposed rulemaking containing the proposed rescission was published in the *Missouri Register* on November 15, 2010 (35 MoReg 1687–1688). No changes have been made in the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 13—DEPARTMENT OF SOCIAL SERVICES
Division 70—MO HealthNet Division
Chapter 15—Hospital Program

ORDER OF RULEMAKING

By the authority vested in the MO HealthNet Division under sections 208.010, 208.152, 208.153, 208.201, and 208.471, RSMo Supp. 2010, the division amends a rule as follows:

13 CSR 70-15.160 Prospective Outpatient Hospital Services Reimbursement Methodology **is amended**.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on November 1, 2010 (35 MoReg 1556–1561). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 20—DEPARTMENT OF INSURANCE, FINANCIAL INSTITUTIONS AND PROFESSIONAL REGISTRATION
Division 2210—State Board of Optometry
Chapter 2—General Rules

ORDER OF RULEMAKING

By the authority vested in the Missouri State Board of Optometry under sections 336.080 and 336.160.1, RSMo Supp. 2010, the board amends a rule as follows:

20 CSR 2210-2.030 License Renewal **is amended**.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on October 1, 2010 (35 MoReg 1409–1411). No changes have been made to the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Updated: 1/3/2011 8:56:15

Construction Transient Employers

The following is a list of all construction contractors performing work on construction projects in Missouri who are known by the Department of Revenue to be transient employers pursuant to Section 285.230, RSMo. This list is provided as a guideline to assist public bodies with their responsibilities under this section that states, "any county, city, town, village or any other political subdivision which requires a building permit for a person to perform certain construction projects shall require a transient employer to show proof that the employer has been issued a tax clearance and has filed a financial assurance instrument as required by Section 285.230 before such entity issues a building permit to the transient employer."

Contractor	Address	City	State	Zip
1ST INTERIORS INC	1100 SE WESTBROOKE DRIVE	WAUKEE	IA	50263
20/20 THEATRICAL	141 STATE HWY 371 S STE 2	HACKENSACK	MN	56452
A & B PROCESS SYSTEMS CORP	201 S WISCONSIN AVE	STRATFORD	WI	54484
A & K RENTALS LLC	11325 EIFF RD	MARISSA	IL	62257
A MALLORY CONCRETE CONTRACTING INC	17601 STORAGE ROAD #7	OMAHA	NE	68145
ACADEMY ROOFING & SHEET METAL CO	6361 NE 14TH ST	DES MOINES	IA	50313
ACE REFRIGERATION OF IOWA INC	6440 6TH ST SW	CEDAR RAPIDS	IA	52404
ACME ELECTRIC COMPANY OF IOWA	3353 SOUTHGATE COURT SW	CEDAR RAPIDS	IA	52404
ACRONYM MEDIA INC	350 5TH AVE STE 5501	NEW YORK	NY	10118
ACTION INSTALLERS INC	1224 CAMPBELL AVE SE	ROANOKE	VA	24013
ADDISON CONSTRUCTION CO	1526 HORSE CREEK RD	CHEYENNE	WY	82009
ADK ELECTRIC INC	9000 NE 90TH STREET	VANCOUVER	WA	98662
ADVANTAGE PROFESSIONAL OF PHOENIX LLC	1995 WEHRLE DR	WILLIAMSVILLE	NY	14221
AE MFG INC	2505 S 33RD W AVE	TULSA	OK	74157
AJ FLOORING INC	2005 KIMBER ROAD	DONGOLA	IL	62926
AKERMAN CONSTRUCTION CO INC	2915 SH 74 SOUTH	PURCELL	OK	73080
ALDRIDGE ELECTRIC INC	844 E ROCKLAND RD	LIBERTYVILLE	IL	60048
ALEGION INC	5266 IVY CREEK ROAD	RUTLEDGE	AL	36071
ALLIANCE INTEGRATED SYSTEMS INC	1500 STUDEMONT	HOUSTON	TX	77007
ALLIED STEEL CONSTRUCTION CO LLC	2211 NW FIRST TERRACE	OKLAHOMA CITY	OK	73107
ALS CONSTRUCTION INC	16506 PINE VALLEY ROAD	PINE	CO	80470
ALTRESS TRUCKING INC	220 W 440 N	WASHINGTON	IN	47501
AM COHRON & SON INC READY MIX CONCRETE	PO BOX 479	ATLANTIC	IA	50022
AMERICAN COATINGS INC	612 W IRIS DR	NASHVILLE	TN	37204
AMERICAN HYDRO	1029 IRS AVE	BALTIMORE	MD	21205
AMERICAN INDUSTRIAL REFRIGERATION INC	1633 EUSTIS	ST PAUL	MN	55108
AMERICAN LIFT & SIGN SERVICE COMPANY	6958 NO 97TH PLAZA	OMAHA	NE	68122
AMRENT CONTRACTING INC	3981 STATE RT 3 NORTH	CHESTER	IL	62233
APOLLO VIDEO TECHNOLOGY	14148 NE 190TH ST	WOODINVILLE	WA	98072
ARBY CONSTRUCTION COMPANY INC	19705 W LINCOLN AVE	NEW BERLIN	WI	53146
ARCHITECTURAL WALL SYSTEMS CO	3000 30TH ST	DES MOINES	IA	50310
ARNOLDS CUSTOM SEEDING LLC	4626 WCR 65	KEENESBURG	CO	80643

Contractor	Address	City	State	Zip
ASPHALT STONE COMPANY	520 N WEBSTER	JACKSONVILLE	IL	62650
ATLANTIC ENGINEERING GROUP INC	1136 ZION CHURCH RD	BRASELTON	GA	30517
ATLAS INDUSTRIAL HOLDINGS LLC	5275 SINCLAIR RD	COLUMBUS	OH	43229
ATWOOD ELECTRIC INC	23124 HIGHWAY 149	SIGOURNEY	IA	52591
B D WELCH CONSTRUCTION LLC	120 INDUSTRIAL STATION RD	STEELE	AL	35987
B&B ELECTRICAL CONTRACTORS INC	627 CIRCLE DR	IRON MOUNTAIN	MI	49801
BD CONSTRUCTION INC.	209 EAST 6TH STREET	KEARNEY	NE	68847
BENCOR CORPORATION OF AMERICA FOUNDATION SPECIALST	2315 SOUTHWELL RD	DALLAS	TX	75229
BERBERICH TRAHAN & CO PA	3630 SW BURLINGAME ROAD	TOPEKA	KS	66611
BERNIE JANNING TERRAZZO & TILE INC	17509 HWY 71	CARROLL	IA	51401
BEST PLUMBING & HEATING	421 SECTION OD	SCAMMON	KS	66773
BESTORE INC	6750 W 75TH STE 1A	OVERLAND PARK	KS	66204
BETTIS ASPHALT & CONSTRUCTION INC	2350 NW WATER WORKDS DR	TOPEKA	KS	66606
BIG BLOCK INC	1340 W MAIN	OLATHE	KS	66061
BIGGE CRANE AND RIGGING CO	10700 BIGGE AVE	SAN LEANDRO	CA	94577
BISON ELECTRIC INC	12037 E PINE ST	TULSA	OK	74116
BLACK CONSTRUCTION CO	18483 US HIGHWAY 54	ROCKPORT	IL	62370
BLAHNIK CONSTRUCTION CO	150 50TH AVE DR SW	CEDAR RAPIDS	IA	52404
BLD SERVICES LLC	2424 TYLER STREET	KENNER	LA	70062
BLUE SKY CONSTRUCTION LLC	17501 NORTHSIDE BLVD	NAMPA	ID	83687
BLUE WATER ENVIRONMENTAL INC	29041 WICK RD	ROMULUS	MI	48170
BOB FLORENCE CONTRACTOR INC	1934 S KANSAS AVE	TOPEKA	KS	66612
BODINE ELECTRIC OF DECATUR	1845 NORTH 22ND ST	DECATUR	IL	62526
BOREAL AVIATION INC	401 AVENUE F	GWINN	MI	49841
BRADFORD BUILDING COMPANY	2151 OLD ROCKY RIDGE RD	BIRMINGHAM	AL	35216
BRB CONTRACTORS INC	400 W CURTIS	TOPEKA	KS	66608
BRIDGE CONSTRUCTION MANAGEMENT SERVICES LLC	11209 STRANG LINE ROAD	LENEXA	KS	66215
BROCK SERVICES LTD	1670 E CARDINAL DR	BEAUMONT	TX	77704
BROOKS DIRECTIONAL DRILLING LLC	24531 102ND DRIVE	BURDEN	KS	67019
BRUCE TRUCKING AND EXCAVATING INC	4401 HWY 162	GRANITE CITY	IL	62040
BRUSH TURBO GENERATORS INC	15110 NW FRWY STE 150	HOUSTON	TX	77040
BRYAN-OHLMEIER CONST INC	911 NORTH PEARL	PAOLA	KS	66071
BUILDING ERECTION SERVICES COMP OF MO LC	15585 SOUTH KEELER	OLATHE	KS	66051
BUMPYS STEEL ERECTION LLC	327 MISSOURI AVENUE	EAST ST LOUIS	IL	62201
C ALEXANDER CONSTRUCTION	744 HORIZON CT STE 135	GRAND JUNCTION	CO	81506
CAM OF ILLINOIS LLC	300 DANIEL BOONE TRAIL	SOUTH ROXANA	IL	62087
CAPITAL INSULATION INC	3210 NE MERIDEN RD	TOPEKA	KS	66617
CAS CONSTRUCTION LLC	501 NE BURGESS	TOPEKA	KS	66608
CASE FOUNDATION CO	1325 W LAKE ST	ROSELLE	IL	60172
CBS CONSTRUCTORS	204 E 1ST	MCCOOK	NE	69001
CCC GROUP INC	5797 DIETRICH RD	SAN ANTONIO	TX	78219

Contractor	Address	City	State	Zip
CCI SYSTEMS INC	105 KENT ST	IRON MOUNTAIN	MI	49801
CELLXION WIRELESS SERVICES LLC	5031 HAZEL JONES RD	BOSSIER CITY	LA	71111
CENTRAL FOUNDATION INC	915 MARION RD S	CENTRAL CITY	IA	52214
CENTRAL ILLINOIS TILE CO	3302 N MATTIS AVE	CHAMPAIGN	IL	61821
CENTRAL SEAL COMPANY	P O BOX 490	DANVILLE	KY	40422
CETCO CONTRACTING SERVICES COMPANY	900 NORTHBROOK DR STE 320	TREVOSE	PA	19053
CHAMPION FLOORING LLC	1820 27TH TERRACE	PITTSBURGH	KS	66762
CHANCE CONSTRUCTION CO	ITALY & BARBER ST	HEMPHILL	TX	75948
CHERNE CONTRACTING CORPORATION	9855 W 78TH ST STE 400	EDEN PRAIRIE	MN	55344
CHRIS GEORGE HOMES INC	2111 E SANTA FE #112	OLATHE	KS	66062
CK CONSTRUCTION	6938 STAGGE ROAD	STURGEON BAY	WI	54235
CK II CONTRACTING INC	7700 FORSYTH AVE	CLAYTON	MO	63105
CLASSIC DESIGN	665 ELMWOOD DRIVE	TROY	MI	48083
CLEARWATER CONSTRUCTION	584 ROCKY ROAD	LUXEMBURG	WI	54217
COAST TO COAST BUILDERS INC	750 E FUNSTON	WICHITA	KS	67211
COASTAL GUNITE CONSTRUCTION CO	16 WASHINGTON ST	CAMBRIDGE	MD	21613
COBALT FINANCIAL CORPORATION	10509 VISTA SORRENTO 200	SAN DIEGO	CA	92121
COBB MECHANICAL CONTRACTORS INC	2906 W MORRISON	COLORADO SPRINGS	CO	80904
COLE RAYWID & BRAVERMAN LLP	1919 PENNSYLAVANIA AVE NW	WASHINGTON	DC	20006
COMMERCIAL CONTRACTORS INC	16745 COMSTOCK STREET	GRANDHAVEN	MI	49417
COMMERCIAL INTERIORS INC	90 NEWBERRY DR	LINN VALLEY	KS	66040
CONCO INC	3030 ALL HALLOWS	WICHITA	KS	67217
CONSTRUCTION SERVICES BRYANT INC	232 NEW YORK ST	WICHITA	KS	67214
CONSTRUCTION ZONE OF DFW LLC	1420 SPRINGHILL RD	AUBREY	TX	76227
COOPERS STEEL FABRICATORS	PO BOX 149	SHELBYVILLE	TN	37162
CREEK ELECTRIC INC	2811 W PAWNEE ST	WICHITA	KS	67213
CROSS COUNTY CONSTRUCTION INC	RR 2 VANCIL RD HWY 24	RUSHVILLE	IL	62681
CROWN CORR INC	7100 W 21ST AVE	GARY	IN	46406
CUMMINGS, MCCLOREY, DAVIS, ACHO & ASSC PC	33900 SCHOOLCRAFT	LIVONIA	MI	48150
CYC CONSTRUCTION INC	10003 S 152N ST	OMAHA	NE	68138
D & B INDUSTRIAL FLOOR COATINGS INC	W137 N8589 LANDOVER CRT	MENOMONEE FALLS	WI	53051
D & D INDUSTRIAL CONTRACTING INC	101 MULLEN DR	WALTON	KY	41094
D & T ROOFING LLC	1437 JAMES DRIVE	KAUFMAN	TX	75142
D A SMITH ENTERPRISES LLC	7532 N SHIRLEY LANE	TUCSON	AZ	85741
D T READ STEEL COMPANY INC	1725 WEST ROAD	CHESAPEAKE	VA	23323
DAMATO BUILDERS + ADVIS0RS LLC	40 CONNECTICUT AVE	NORWICH	CT	06360
DANNYS CONSTRUCTION CO INCORPORATED	1066 WEST THIRD AVENUE	SHAKOPEE	MN	55379
DAVID BOLAND INC	SE ARNOLD & PERIMETER RD	WHITEMAN AFB	MO	65305
DB HEALTHCARE INC	128 WHEELER ROAD	BURLINGTON	MA	01803
DCG PETERSON BROTHERS COMPANY	5005 S HWY 71	SIOUX RAPIDS	IA	50585
DEAN STEEL ERECTION COMPANY INC	5366 N VALLEY PIKE	HARRISONBURG	VA	22803

Contractor	Address	City	State	Zip
DEEP SOUTH FIRE TRUCKS INC	2342 HIGHWAY 49 NORTH	SEMINARY	MS	39479
DIAMOND CONSTRUCTION COMPANY	2000 N 18TH ST	QUINCY	IL	62301
DIAMOND SURFACE INC	13792 REIMER DR N	MAPLE GROVE	MN	55311
DIG AMERICA UTILITY CONTRACTING INC	606 25TH AVE SO STE 202	ST CLOUD	MN	56301
DOME CORPORATION OF NORTH AMERICA	5450 EAST ST	SAGINAW	MI	48601
DON BORNEKE CONSTRUCTION INC	41537 50TH ST	JANESVILLE	MN	56048
DOSTER CONSTRUCTION CO INC	2100 INTERNATIONAL PARK D	BIRMINGHAM	AL	35243
DOUBLE O MASONRY INC	722 S 260TH ST	PITTSBURG	KS	66762
DPLM	1704 E EUCLID AVE	DES MOINES	IA	50313
DRC EMERGENCY SERVICES LLC	740 MUSEUM DRIVE	MOBILE	AL	36608
DUALTEMP INSTALLATIONS INC	3695 J N 126TH STREET	BROOKFIELD	WI	53005
DUBOIS TORREY	503 SAND HILL ROAD	LUXEMBURG	WI	54217
DUNK FIRE & SECURITY INC	3446 WAGON WHEEL RD	SPRINGDALE	AR	72762
DUREX COVERINGS INC	53 INDUSTRIAL RD	BROWNSTOWN	PA	17508
DUSTROL INC	GEN DEL	EL DORADO	KS	67042
DWG & ASSOCIATES INC	8535 SOUTH 700 WEST	SANDY	UT	84070
DYER ELECTRIC	8171 TOP FLITE CIRCLE	ROGERS	AR	72756
DYNOTEC INC	2931 E DUBLIN GRANVILLE	COLUMBUS	OH	43231
E ROBERTS ALLEY & ASSOCIATES INC	300 10TH AVE S	NASHVILLE	TN	37203
E80 PLUS CONSTRUCTORS LLC	600 BASSETT ST	DEFOREST	WI	53532
ECHO CONSTRUCTION INC	14012 GILES RD	OMAHA	NE	68138
ECONOMY ELECTRICAL CONTRACTORS	101 CENTURY 21 DR #204	JACKSONVILLE	FL	32216
EDWARDS KAMADULSKI LLC	2230 CLEVELAND AVENUE	EAST ST LOUIS	IL	62205
EIB CONTRACTORS INC	5416 SCHERTZ RD	SAN ANTONIO	TX	78233
ELECTRIC CONSTRUCTION CO	1512 E 17TH ST	SIOUX FALLS	SD	57104
ELECTRICAL BUILDERS INC	20246 EDGEWOOD RD	KIMBALL	MN	56353
ELECTRICO INC	7706 WAGNER ROAD	MILLSTADT	IL	62260
ELEMENTS DESIGN BUILD LLC	1136 HILLTOP DR	LAWRENCE	KS	66044
EMCO CHEMICAL DISTRIBUTORS INC	2100 COMMONWEALTH AVE	NORTH CHICAGO	IL	60064
EMERALD CONSTRUCTION MANAGEMENT INC	794 VENTURA ST STE A	AURORA	CO	80011
EMPLOYEE RESOURCE ADMINISTRATION LP	12400 COIT RD #1030	DALLAS	TX	75251
ENGINEERED STRUCTURES INC	12400 W OVERLAND RD	BOISE	ID	83709
ENGLEWOOD CONSTRUCTION INC	9747 W FOSTER AVENUE	SCHILLER PARK	IL	60176
ENTERPRISE ELECTRICAL & MECHANICAL CO	9211 CASTLEGATE DRIVE	INDIANAPOLIS	IN	46256
ENVIRONMENTAL FABRICS INC	85 PASCON CT	GASTON	SC	29053
ENVISION CONTRACTORS LLC	2960 FAIRVIEW DR	OWENSBORO	KY	42303
EROCON INC	15720 S KEELER ST	OLATHE	KS	66062
EVCO NATIONAL INC	339 OLD ST LOUIS RD	WOOD RIVER	IL	62095
EVERGREEN CONSULTING GROUP LLC	12184 SW MORNING HILL DR	TIGARD	OR	97223
EXCEL ENGINEERING INC	500 73RD AVE NE STE 119	FRIDLEY	MN	55432
EXPRESS INSULATION INC	N9450 HWY 175	THERESA	WI	53091

Contractor	Address	City	State	Zip
F & M SOUTHERN INC	2201 HAMLIN ROAD	UTICA	MI	48317
F L CRANE & SONS INC	508 S SPRING	FULTON	MS	38843
FABCON INCORPORATED	6111 WEST HIGHWAY 13	SAVAGE	MN	55378
FARABEE MECHANICAL INC	P O BOX 1748	HICKMAN	NE	68372
FARMER ENVIRONMENTAL SERVICES LLC	108 EMERALD HILLS DR	EDWARDSVILLE	IL	62025
FAYETTEVILLE PLUMBING & HEATING CO INC	P O BOX 1061	FAYETTEVILLE	AR	72702
FEDERAL FIRE PROTECTION INC	805 SECRETARY DR STE A	ARLINGTON	TX	76015
FEDERAL STEEL & ERECTION	200 E ALTON AVE	EAST ALTON	IL	62024
FIRST CONSTRUCTION GROUP INC	3729 WEST AVE	BURLINGTON	IA	52601
FISHEL COMPANY THE	1810 ARLINGATE LN	COLUMBUS	OH	43228
FLEMINGTON CONSTRUCTION INC	9207 SLATER	OVERLAND PARK	KS	66212
FLORIDA INSTITUTE OF TECHNOLOGY INC	150 W UNIVERSITY BLVD	MELBOURNE	FL	32901
FMRS INC	405 ST PETERSBURG DR #6	OLDSMAR	FL	34677
FOUNDATION SPECIALIST INC	328 SOUTH 40TH STREET	SPRINGDALE	AR	72762
FRED CHRISTEN & SONS COMPANY THE	714 GEORGE ST	TOLEDO	OH	43608
FRONT RANGE ENVIRONMENTAL LLC	2110 W WRIGHT RD	MCHENRY	IL	60050
FRONTIER CONSTRUCTION COMPANY INC	48243 FRONTIER LANE	DEER RIVER	MN	56636
GAMMA CONSTRUCTION COMPANY	2808 JOANEL	HOUSTON	TX	77027
GARCIA CHICOINE ENTERPRISES INC	1118 NORTH 22ND STREET	LINCOLN	NE	68503
GAS ELECTRICAL SERVICES INC	216 W 2ND STREET	HOLSTEIN	IA	51025
GASS BRICKWORK INC	6205 COUNTRYSIDE LANE	FREEBURG	IL	62243
GBA SYSTEMS INTEGRATORS LLC	9801 RENNER BLVD	LENEXA	KS	66219
GEA POWER COOLING INC	143 UNION BLVD STE 400	LAKEWOOD	CO	80228
GEISSLER ROOFING CO INC	612 S 3RD ST	BELLEVILLE	IL	62220
GENESEE FENCE & SUPPLY CO	53861 GRATIOT	CHESTERFIELD	MI	48051
GEOFIRMA LLC	605 HARPETH KNOLL ROAD	NASHVILLE	TN	37221
GOLEY INC	P O BOX 309	DUPO	IL	62239
GOOLSBY INC	3002 WEST MAIN STRET	BLYTHEVILLE	AR	72315
GORDON ENERGY AND DRAINAGE	15735 S MAHAFFIE	OLATHE	KS	66062
GRAHAM CONSTRUCTION INC	5TH & WALNUT	COLUMBIA	MO	65205
GRAYCLIFF ENTERPRISES INC	3300 BATTLEGROUND #100	GREENSBORO	NC	27410
GRE CONSTRUCTION	628 PALESTINE RD	CHESTER	IL	62233
GRP MECHANICAL COMPANY INC	1 MECHANICAL DR	BETHALTO	IL	62010
GUS CONST CO INC	606 ANTIQUE COUNTRY DR	CASEY	IA	50048
GYPSUM FLOORS OF AR/OK INC	PO BOX 1707	MULDROW	OK	74948
H & H SERVICES INC	391 OLD RTE N 66	HAMEL	IL	62046
H & H SYSTEMS & DESIGN INC	130 EAST MAIN ST	NEW ALBANY	IN	47150
H & L ELECTRIC INC	11130 LEGION DRIVE	SAINT GEORGE	KS	66535
H & M CONSTRUCTION CO INC	50 SECURITY DR	JACKSON	TN	38305
H & M INDUSTRIAL SERVICES INC	121 EDWARDS DR	JACKSON	TN	38302
H&H DRYWALL SPECIALTIES INC	3727 E 31ST STR	TULSA	OK	74135
HALL BROTHERS RECYCLING & RECLAMATION INC	124 INDIANA AVE	SALINA	KS	67401

Contractor	Address	City	State	Zip
HALL PAVING INC	1196 PONY EXPRESS HWY	MARYSVILLE	KS	66508
HAREN & LAUGHLIN RESTORATION COMPANY INC	8035 NIEMAN RD	LENEXA	KS	66214
HARVEY NASH INC	1680 ROUTE 23 N STE 300	WAYNE	NJ	07470
HAWKINS CONSTRUCTION COMPANY	2516 DEER PARK BLVD	OMAHA	NE	68105
HC BECK LTD	1820 MARKET ST FL 3	ST LOUIS	MO	63103
HENDERSON ENGINEERS INC	8325 LENEXA DR STE 400	LENEXA	KS	66214
HG DALLAS CONSULTING LLC	6860 N DALLAS PKWY	PLANO	TX	75024
HIGH CONCRETE GROUP LLC	4990 CHILDRENS PL	ST LOUIS	MO	63110
HIGH LINE SERVICES LLC	410 S HIGH STREET	DIGHTON	KS	67839
HINRICHS GROUP INC THE	340 OFFICE COURT STE A	FAIRVIEW HEIGHTS	IL	62208
HOFFMANN INC	6001 49TH ST S	MUSCATINE	IA	52761
HOLLIS ROOFING INC	P O BOX 2229	COLUMBUS	MS	39704
HOOPER CORPORATION	P O BOX 7455	MADISON	WI	53707
HORIZON GENERAL CONTRACTORS INC	7315 W ELIZABETH LN	FT WORTH	TX	76116
HORIZONTAL BORING & TUNNELING CO	505 S RIVER AVE	EXETER	NE	68351
HORNE CONSTRUCTION & DEVELOPMENT INC	525 SOUTH 300 WEST	SALT LAKE CITY	UT	84101
HOWARD CONCRETE CONSTRUCTION	14600 S 690 ROAD	WYANDOTTE	OK	74370
HUMAN CAPITAL CONCEPTS LLC	1075 BROAD RIPPLE AVE	INDIANAPOLIS	IN	46220
HUSTON CONTRACTING INC	25640 W 143RD ST	OLATHE	KS	66061
HUTTON CONTRACTING CO INC	HWY 50	LINN	MO	65051
I & I CONSTRUCTION INC	21050 N BRADY ST STE A	DAVENPORT	IA	52804
IMPERIAL ROOF SYSTEMS CO	203 ARMOUR ST	WEST UNION	IA	52175
INDUSTRY SERVICES CO INC	5550 TODD ACRES DR	MOBILE	AL	36619
INGRAM CONSTRUCTION COMPANY INC OF	173 HOY RD	MADISON	MS	39110
INTELIGENTE SOLUTIONS INC	17199 N LAUREL PK DR #321	LIVONIA	MI	48152
INTERNATIONAL INDUSTRIAL CONTRACTING CORP	35900 MMOUND RD	STERLING HEIGHTS	KS	48310
IRBY CONSTRUCTION CO	817 S STATE ST	JACKSON	MS	39201
ISEC INC	33 INVERNESS DR E	ENGLEWOOD	CO	08990
ISIS CONSULTANTS LLC	6200 FEGENBUSH LANE	LOUISVILLE	KY	40228
J & K CONTRACTING OF KANSAS LC	801 WEST 6TH STREET	JUNCTION CITY	KS	66441
JACOBS LADDER INC	2325 COBDEN SCHOOL ROAD	COBDEN	IL	62920
JACOBSON DANIELS ASSOCIATION	121 PEARL STREET	YPSILANTI	MI	48197
JAMAR COMPANY THE	1100 OLD HIGHWAY 8 NW	NEW BRIGHTON	MN	55112
JAMES N GRAY CONSTRUCTION CO	250 W MAIN ST	LEXINGTON	KY	40507
JD FINNEGAN INC	1724 BERKELEY WAY	SACRAMENTO	CA	95819
JD FRANKS INC	1602 S BELTINE ROAD	DALLAS	TX	75253
JEN MECHANICAL INC	803 HOPP HOLLOW DR	ALTON	IL	62002
JESCO INC	2020 MCCULLOUGH BLVD	TUPELO	MS	38801
JF BRENNAN CO INC	820 BAINBRIDGE ST	LA CROSSE	WI	54603
JOHN A PAPALAS & CO	1187 EMPIRE	LINCOLN PARK	MI	48146
JOHN E GREEN COMPANY	220 VICTOR AVE	HIGHLAND PARK	MI	48203

Contractor	Address	City	State	Zip
JOHNSONS BUILDERS	1455 HODGES FERRY ROAD	DOYLE	TN	38559
JOLLEY CONSTRUCTION COMPANY	2034 HAMILTON PL BLVD 200	CHATTANOOGA	TN	37421
JOMAX CONSTRUCTION COMPANY INC	S 281 HWY	GREAT BEND	KS	67530
JOY MASONRY	124 S BALTIMORE STE I	DERBY	KS	67037
JP PIPELINE CONSTRUCTION INC	81 ARROWHEAD ROAD	INMAN	KS	67546
JR JENSEN CONSTRUCTION COMPANY	814 21ST AVENUE EAST	SUPERIOR	WI	54880
K R SWERDFEGER CONSTRUCTION INC	421 E INDUSTRIAL BLVD	PUEBLO WEST	CO	81007
KAISER ELECTRICAL CONTRACTORS INC	310A ERIE AVENUE	MORTON	IL	61550
KANSAS BUSINESS FORMS AND SUPPLIES INC	505 MAIN ST	BELTON	MO	64012
KASBOHM CUSTOM DRILLING INC	11404 OAKTON RD	SAVANNA	IL	61074
KBS CONSTRUCTORS INC	1701 SW 41ST	TOPEKA	KS	66609
KENT ANDERSON CONCRETE LP	830 E VALLEY RIDGE BLVD	LEWISVILLE	TX	75057
KIEWIT BUILDING GROUP INC	3555 FARNAM ST	OMAHA	NE	68131
KILIAN CORPORATION THE	608 S INDEPENDENCE	MASCOUTAH	IL	62258
KIM CON INC	10003 S 152ND ST	OMAHA	NE	68138
KING OF TEXAS ROOFING COMPANY LP	307 GILBERT CIRCLE	GRAND PRAIRIE	TX	75050
KING PIPELINE INC	7141 AMANDA ROAD	LINCOLN	NE	68507
KINLEY CONSTRUCTION COMPANY	201 N UNION ST BNK RM 502	OLEAN	NY	14760
KINLEY CONSTRUCTION GROUP LP	4025 WOODLAND PK BLVD 410	ARLINGTON	TX	76013
KR&G EXCAVATING PARTNERS LLC	7 STONEHILL ROAD	OSWEGO	IL	60543
KTU CONSTRUCTORS A JOINT VENTURE	2708 NE INDENPENDENCE AVE	LEE'S SUMMIT	MO	64064
L & L INSULATION & SUPPLY CO	3810 B PAULE AVE	ST LOUIS COUNTY	MO	63125
L B A AIR HTG & PLBG INC	6226 MARRIAM DR	MERRIAM	KS	66203
L G ELECTRIC INC	701 E 15TH ST	CHEYENNE	WY	82001
LAFORGE & BUDD CONST CO INC	DEN GEL	PARSON	KS	67357
LAKEVIEW CONSTRUCTION OF WISCONSIN	10505 CORPORATE DR #200	PLEASANT PRAIRI	WI	53158
LAMAR MOORE CONSTRUCTION INC	4401 STATE ROUTE 162	GRANITE CITY	IL	62040
LAVEREDIERE CONSTRUCTION INC	4055 W JACKSON ST	MACOMB	IL	61455
LEGACY ENGINEERING LLC	18662 MACARTHUR STE 457	IRVINE	CA	92617
LIMBAUGH CONSTRUCTION CO INC	4186 HWY 162	GRANITE CITY	IL	62040
LONGS DRILLING SERVICE INC	6768 LYNX LANE	HARRISON	AR	72601
LPR CONSTRUCTION CO	1171 DES MOINES AVE	LOVELAND	CO	80537
LUKE & ASSOCIATES INC	3401 N COURTENAY PKWY 101	MERRITT ISLAND	FL	32953
LUSE THERMAL TECHNOLOGIES LLC	3990 ENTERPRISE COURT	AURORA	IL	60504
M & A JONES CONSTRUCTION CO INC	P O BOX 3944	BATESVILLE	AR	72503
M & W CONTRACTORS INC	400 S STEWART ST	E PEORIA	IL	61611
M&J ELECTRIC OF WICHITA LLC	1444 S ST CLAIR BLDG D	WICHITA	KS	67213
MAHAFFEY CONSTRCUTION	102 ESTATES DR	GREEN FOREST	AR	72638
MAHAFFEY CONSTRUCTION	102 ESTATES DR	GREEN FOREST	AR	72638
MAINSTREET MUFFLER AND BRAKE	1406 N MAIN STREET	HARRISON	AR	72601
MAJOR DRILLING ENVIRONMENTAL LLC	2200 S 4000 W	SALT LAKE CITY	UT	84120
MAJOR REFRIGERATION CO INC	314 NORTHWESTERN AVENUE	NORFOLK	NE	68701

Contractor	Address	City	State	Zip
MARKETING ASSOCIATES INC	131 ST JAMES WAY	MOUNT AIRY	NC	27030
MAROLD ELECTRIC INC	1925 SHERWOOD LAKE ESTATE	QUINCY	IL	62305
MCBRIDE ELECTRIC INC	3215 E 9TH N	WICHITA	KS	67208
MCCIZER PIPELINE INC	272 HWY 167 N	BALD KNOB	AR	72010
MDS BUILDERS INC	5455 N FEDERAL HWY	BOCA RATON	FL	33487
MEADOWS CONSTRUCTION CO INC	1014 FRONT ST	TONGANOXIE	KS	66086
MECHANICAL CONSTRUCTION SERVICES IN	1711 MELROSE DR	BENTON	AR	72015
MECHANICAL SERVICE COMPANY	5440 NORTHSHORE DRIVE	NORTH LITTLE ROCK	AR	72118
MERCON CORPORATION	28425 FOX RIDGE COURT	DANBURY	WI	54830
MERZ VAULT INC	512 COTTONWOOD	SALEM	IL	62881
METROPOLITAN PAVEMENT SPECIALISTS LLC	14012 GILES RD	OMAHA	NE	68138
MEYERS PLUMBING	4117 MAIN STREET RD	KEOKUK	IA	52632
MID STATES ELECTRIC CO INC	P O BOX 156	S SIOUX CITY	NE	68776
MIDSOUTH SPECIALTY CONSTRUCTION LLC	5731 OSBOURNE RD	ST JOE	AR	72675
MIDWEST MOLE INC	2460 N GRAHAM AVE	INDIANAPOLIS	IN	46218
MIKE PETERSON CONSTRUCTION	1941 RAMROD AVENUE STE A	HENDERSON	NV	89014
MILAN DECORATORS INC	2047 KEFAUVER DR	MILAN	TN	38358
MILESTONE CONSTRUCTION CO LLC	2002 SOUTH 48TH STREET	SPRINGDALE	AR	72762
MILLER DRILLING COMPANY INC	107 HELTON DR	LAWRENCEBURG	TN	38464
MILLER THE DRILLER	5125 E UNIVERSITY	DES MOINES	IA	50317
MILLS ELECTRICAL CONTRACTORS	2535 WALNUT HILL LN	DALLAS	TX	75229
MIXONSITE USA INCORPORATED	1501 ABBOTT COURT	BUFFALO GROVE	IL	60089
MJ HARRIS INC	2620 N WESTWOOD BLVD	POPLAR BLUFF	MO	63901
MORRIS BECK CONSTRUCTION SERVICES INC	8100 COLONEL GLENN RD	LITTLE ROCK	AR	72204
MORRIS SHEA BRIDGE CO INC	1820 1ST AVENUE SOUTH	IRONDALE	AL	35210
MORRISSEY CONTRACTING CO	705 SOUTHMOOR PL	GODFREY	IL	62035
MULTIPLE CONCRETE ENTERPRISES	1680 W 1000 N	LAYTON	UT	84041
MUNIE COMPANY	1000 MILBOURN SCHOOL ROAD	CASEYVILLE	IL	62232
MW BUILDERS OF TEXAS INC	1701 N GENERAL BRUCE DR	TEMPLE	TX	76504
MYLES LORENTZ INC	48822 OLD RIVER BLUFF RD	ST PETER	MN	56082
NATGUN CORP	11 TEAL RD	WAKEFIELD	MA	01880
NEESE INC	303 DIVISION PO BOX 392	GRAND JUNCTION	IA	50107
NELSON INDUSTRIAL SERVICES INC	6021 MELROSE LN	OKLAHOMA CITY	OK	73127
NEW DIMENSION INC	631 E BIG BEAVER #109	TROY	MI	48083
NEW TEAM LLC	110 E BROWARD BLVD 2450	FT LAUDERDALE	FL	33301
NORTH MISSISSIPPI CONVEYOR COMPANY INC	HWY 7S LAFAYETTE CO RD370	OXFORD	MS	38655
NORTHERN CLEARING INC	1805 W MAIN ST	ASHLAND	WI	54806
NORTHWEST CONCRETE CUTTING CORP	1001 E 52ND ST NORTH	SIOUX FALLS	SD	57104
NORWOOD COMMERCIAL CONTRACTORS INC	214 PARK ST	BENSENVILLE	IL	60106
NU TEC ROOFING CONTRACTORS LLC	5025 EMCO DRIVE	INDIANAPOLIS	IN	46220
OMNI ENGINEERING INC	14012 GILES RD	OMAHA	NE	68138
ON AIR SOLUTIONS INC	8807 EMMOTT RD 2000	HOUSTON	TX	77040

Contractor	Address	City	State	Zip
ON LINE DESIGN INC	12057 SHERATON LN	CINCINNATI	OH	45246
ORASURE TECHNOLOGIES INC	220 EAST FIRST STREET	BETHLEHEM	PA	18015
OUT OF BOUNDS INC	101 AIRPORT ROAD	ALTO	NM	88312
P1 GROUP INC	16210 W 108TH ST	LENEXA	KS	66219
PADGETT BUILDING & REMODELING INC	4200 SMELTING WORKS RD	BELLEVILLE	IL	62226
PASCHAL HEATING & AIR CONDITIONING CO INC	287 W COUNTY LINE ROAD	SPRINGDALE	AR	72764
PCI ROADS LLC	14123 42ND ST NE	ST MICHAEL	MN	55376
PCS CONSTRUCTION INC	30266 130TH STREET	WAYNE	OK	73095
PETTUS PLUMBING & PIPING INC	P O BOX 3237	MUSCLE SHOALS	AL	35662
PIASA COMMERCIAL INTERIORS INC	1001 S MORRISON AVE	COLLINSVILLE	IL	62234
PLUM RHINO CONSULTING LLC	1010 HUNTCLIFF STE 1350	ATLANTA	GA	30350
P-N-G CONTRACTING INC	917 CARLA DR	TROY	IL	62294
POTTER ELECTRIC	2801 W 7TH STREET	ELK CITY	OK	73644
PRECAST ERECTORS INC	3500 VALLEY VISTA DR	HURST	TX	76053
PRICE GREGORY INTERNATIONAL INC	15660 N DALLAS PRKY #300	DALLAS	TX	75248
PROCTOR MECHANICAL CORPORATION	1100 HOAK DRIVE	WEST DES MOINES	IA	50265
PROFESSIONAL HVAC R SERVICES INC	2861 CENTER RD	AVON	OH	44011
PROJECT BUILDERS INC	1996 CLIFF VALLEY WAY NE	ATLANTA	GA	30329
PULTE PAYROLL CORPORATION	100 BLOOMFIELD HILLS #300	BLOOMFIELD HILLS	MI	48034
QUALITY ELECTRIC OF DOUGLAS COUNTY INC	1011 E 31ST STREET	LAWRENCE	KS	66046
QUICKWIRE COMMUNICATIONS INC	3620 PRESTIGE LANE	MINNETONKA	MN	55305
QUOVADX INC	7600 E ORCHARD RS 300 S	GREENWOOD VILLAGE	CO	80111
RAGAN MECHANICAL INC	702 W 76TH STREET	DAVENPORT	IA	52806
RAGO CONCRETE LTD	5610 FM 2218	RICHMOND	TX	77469
RAM CONSTRUCTION SERVICES OF MINNESOTA LLC	13800 ECKLES RD	LIVONIA	MI	48150
RAMSEY WELDING INC	5360 E 900TH AVENUE	ALTAMONT	IL	62411
RANGER PLANT CONSTRUCTIONAL CO INC	5851 E INTERSTATE 20	ABILENE	TX	79601
RCS CONSTRUCTION INC	197 OLD ST LOUIS RD	WOOD RIVER	IL	62095
REASONS CONSTRUCTION COMPANY INC	3825 EAST END DR	HUMBOLDT	TN	38343
REGENCY CONSTRUCTORS LLC	4744 JAMESTOWN AV STE 103	BATON ROUGE	LA	70808
RELIATECH INC	2280 SIBLEY COURT	EAGAN	MN	55122
REMCON GENERAL CONTRACTING INC	10311 RT E	JEFFERSON CITY	MO	65101
RENIER CONSTRUCTION CORPORATION	2164 CITY GATE DRIVE	COLUMBUS	OH	43219
REPIPE CONSTRUCTION LTD	131 N RICHEY	PASADENA	TX	77506
RETAIL CONSTRUCTION SERVICES INC	11343 39TH ST N	ST PAUL	MN	55042
RETAIL STOREFRONT GROUP INC	419 MIAMI AVE	LEEDS	AL	35094
RFB CONSTRUCTION CO INC	565 E 520TH AVE	PITTSBURGH	KS	66762
RFW CONSTRUCTION GROUP LLC	1315 N CHOUTEAU TRAFFICWA	KANSAS CITY	MO	64120
RHYTHM ENGINEERINGLLC	12351 W 96TH TER STE 107	LENEXA	KS	66214
RISE GROUP THE	120 S LASALLE ST STE 1350	CHICAGO	IL	60603
RL MURPHEY COMMERCIAL ROOF MANAGEMENT LLC	5699 N DARDEMAN ROAD	JUSTIN	TX	76247
ROBINETTE DEMOLITION INC	0 S 560 ROUTE 83	OAKBROOK	IL	60181

Contractor	Address	City	State	Zip
ROBINS & MORTON GROUP THE	400 SHADES CREEK PKWY	BIRMINGHAM	AL	35209
ROCK REMOVAL RESOURCES LLC	423 E BRONSON ROAD	SEYMOUR	WI	54165
ROD TECHS INC	5991 MIEJER DRIVE STE 22	MILFORD	OH	45150
ROEHL REFRIGERATED TRANSPORT LLC	1916 E 29TH STREET	MARSHFIELD	WI	54449
RON WEERS CONSTRUCTION INC	20765 S FOSTER COURT	BUCYRUS	KS	66013
ROSS & ASSOC OF RIVER FALLS WISCONSIN LTD	246 SUMMIT	RIVER FALLS	WI	54022
RUPP MASONRY CONSTRUCTION CO	1501 N 18TH STREET	QUINCY	IL	62301
RUSSELL CONSTRUCTION CO	3032 A NORTH FRAZIER ST	CONROE	TX	77303
RUSSELL CONSTRUCTION COMPANY	1414 MISSISSIPPI BLVD	BETTENDORF	IA	52722
RYAN COMPANIES US INC	50 S TENTH ST SUT 300	MINNEAPOLIS	MN	55403
S & B CONSTRUCTION CO LLC	117 E WASHINGTON ST	INDIANAPOLIS	IN	46204
S M STOLLER CORPORATION THE	105 TECHNOLOGY DR STE 190	BROOMFIELD	CO	80021
S T COTTER TURBINE SERVICES INC	2167 196TH STREET EAST	CLEARWATER	MN	55320
SA SMITH ELECTRIC INC	525 JERSEY ST	QUINCY	IL	62301
SASCO	1227 N MARKET BLVD	SACRAMENTO	CA	95834
SCHEAR CORPORATION	5490 LEE STREET	LEHIGH ACRES	FL	33971
SCHMIDT CONSTRUCTION	2549 BURMEISTER ROAD	STURGEON BAY	WI	54235
SCHUMACHER ELEVATOR COMPANY	ONE SCHUMAKER WAY	DENVER	IA	50622
SCHUPPS LINE CONSTRUCTION INC	10 PETRA LANE	ALBANY	NY	12205
SCHWEITZER ENGINEERING LABORATORIES INC	2350 NE HOPKINS CT	PULLMAN	WA	99163
SEK HEAT & AIR INC	422 W ATKINSON	PITTSBURG	KS	66762
SHAFER GROUP LLC	29150 C DRIVE NORTH	ALBION	MI	49224
SHAKTHY INFORMATION SYSTEMS INC	13910 FALCONCREST ROAD	GERMANTOWN	MD	20874
SHAWNEE MISSION TREE SERVICE INC	8250 COLE PKWY	SHAWNEE MSN	KS	66227
SHIELDS TELECOMM INC	7 CIRCLE DR	MOUNT VERNON	IL	62864
SHILLING CONSTRUCTION CO INC	555 POYNTZ AVE STE 260	MANHATTAN	KS	66502
SIERRA BRAVO CONTRACTORS LLC	7038 HWY 154	SESSER	IL	62884
SIMMONS BROWDER GIANARIS ANGELIDES & BARNERD LLC	707 BERKSHIRE BLVD	EAST ALTON	IL	62024
SKYLIGHT FINANCIAL INC	1455 LINCOLN PKWY STE 600	ATLANTA	GA	30346
SKYTOP TOWERS INC	13503 W US HWY 34	MALCOLM	NE	68402
SLUDGE TECHNOLOGY INC	8101 W 33RD STREET S	MUSKOGEE	OK	74401
SNYDER ENVIRONMENTAL & CONSTRUCTION INC	124 W CAPITOL AVE STE1820	LITTLE ROCK	AR	72201
SOUTHEAST DIRECTIONAL DRILLING LLC	3117 N CESSDA AVE	CASA GRANDE	AZ	85222
SOUTHERN CONCRETE PRODUCTS INC	266 E CHRUCH STREET	LEXINGTON TN	TN	38351
SOUTHWINDS INSPECTION CORP	RT 2 BOX 88A	KINGFISHER	OK	73750
SPECTRA TECH LLC	16100 ALLISONVILLE RD	NOBLESVILLE	IN	46060
SPORTS METALS INC	P O BOX 1338	PHENIX CITY	AL	36868
STANDARD HEATING AND AIR CONDITIONING INC	11746 PORTAL ROAD	LA VISTA	NE	68128
STAROSTKA GROUP UNLIMITED	429 INDUSTRIAL LANE	GRAND ISLAND	NE	68803
STEPHENS & SMITH CONSTRUCTION CO INC	1542 S 1ST ST	LINCOLN	NE	68502
STILL CONTRACTORS LLC	15740 S MAHAFFIE ST	OLATHE	KS	66062

Contractor	Address	City	State	Zip
STORK TWIN CITY TESTING CORPORATION	662 CROMWELL AVENUE	ST PAUL	MN	55114
STOVALL CONSTRUCTION INC	7409 US HWY 287	ARLINGTON	TX	76001
STREICHER EXCAVATING INC	1718 EAST BREMER AVE	WAVERLY	IA	50677
STRINGER CONSTRUCTION COMPANY INC	6141 LUCILE AVE	SHAWNEE	KS	66203
STRUKEL ELECTRIC INC	375 W WALNUT ST	GIRARD	KS	66743
STUEVE CONSTRUCTION COMPANY	2201 E OAK ST	ALGONA	IA	50511
STURZENBECKER CONSTRUCTION COMPANY INC	1113 44TH AVE N STE 300	MYRTLE BEACH	SC	29577
SUNCON INC	#2 TERMINAL DR STE 17A	EAST ALTON	IL	62002
SUPERIOR INSULATION INC	34857 BRUSH STREET	WAYNE	MI	48184
SURFACE PREPARATION TECHNOLOGIES INC	81 TEXACO ROAD	MECHANICSBURG	PA	17055
SW HUFFMAN CONSTRUCTION INC	PO BOX 99	OTTUMWA	IA	52501
SYNERGY REFRIGERATION INC	1680 ROBERTS BLVD	KENNESAW	GA	30144
SYRSTONE INC	7395 TAFT PARK DR	EAST SYRACUSE	NY	13057
TAIL WIND TECHNOLOGIES CORPORATION	13911 RIDGEDALE DR #310	MINNETONKA	MN	55305
TANCO ENGINEERING INCORPORATED	1400 TAURUS COURT	LOVELAND	CO	80537
TANK BUILDERS INC	13400 TRINITY BLVD	EULESS	TX	76039
TASKE FORCE INC	1013 MAIN STREET	KEOKUK	IA	52632
TEAMWAY BUILDERS INC	100 TOWER DR 15	GREENVILLE	SC	29616
TEKRAN INSTRUMENTS CORPORATION	330 NANTUCKET BLVD TORONT	ONT CAN M1P2P4	ON	99999
TELECRAFTER SERVICES LLC	13131 W CEDAR DR	LAKEWOOD	CO	80228
TENCON INC	530 JONES ST	VERONA	PA	15147
TENOCH CONSTRUCTION INC	6216 MISSION RD	FAIRWAY	KS	66205
TERWISSCHA CONSTRUCTION INC	1107 HAZELTINE BLVD MD 68	CHASKA	MN	55318
THOMPSON ELECTRONICS COMPANY	905 S BOSCH ROAD	PEORIA	IL	61607
TITAN BUILT LLC	11865 S CONLEY	OLATHE	KS	66061
TITAN CONTRACTING & LEASING CO INC	2205 RAGU DRIVE	OWENSBORO	KY	42302
TOMS TUCKPOINTING LLC	410 W ELM	CORNING	AR	72422
TONTO CONSTRUCTION INC	HWY 16 W 78TH ST	MUSKOGEE	OK	74401
TOURNEAR ROOFING CO	2605 SPRING LAKE RD	QUINCY	IL	62305
TRAC WORK INC	303 W KNOX	ENNIS	TX	75119
TRAFFIC CALMING USA	110 THOMPSON RD #102A	HIRAM	GA	30141
TRAFFIC CONTROL SERVICES LLC	1411 STONERIDGE DRIVE	MIDDLETOWN	PA	17057
TRIAGE CONSULTING GROUP	221 MAIN STREET STE 1100	SAN FRANCISCO	CA	94105
TRUCK CRANE SERVICE COMPANY	2875 HIGHWAY 55	EAGAN	MN	55121
TULSA DYNASPAN INC	1601 E HOUSTON ST	BROKEN ARROW	OK	74012
TULSA INSPECTION RESOURCES INC	12811 E 86TH PLACE N #106	OWASSO	OK	74055
TULSA INSPECTION RESOURCES INC	4111 S DARLINGTON #1000	TULSA	OK	74135
TWEET GAROT MECHANICAL INC	2545 LARSEN RD	GREEN BAY	WI	54303
UCI INC	659 N MAIN	WICHITA	KS	67214
ULTIMATE THERMAL INC	P O BOX 34818	OMAHA	NE	68134
UNDERGROUND UTILITIES CONTRACTORS INC	403 COMMERCE PARK DR	CABOT	AR	72023
UNITED EXCEL CORPORATION	5425 ANTIOCH RD	MERRIAM	KS	66202

Contractor	Address	City	State	Zip
UNIVERSAL SERVICES TELECOMMUNICATIONS TECHS INC	12151 120TH STREET SOUTH	HASTINGS	MN	55033
US ASPHALT CO	14012 GILES RD	OMAHA	NE	68138
VECTOR CONSTRUCTION INC	3814 3RD AVE NW	FARGO	ND	58102
VEI GENERAL CONTRACTORS INC	P O BOX 1032	RUSSELLVILLE	AR	72811
VFP FIRE SYSTEMS INC	301 YORK AVE	ST PAUL	MN	55130
VICS CRANE & HEAVY HAUL INC	3000 145TH STREET EAST	ROSEMOUNT	MN	55068
VISIONSOFT INTERNATIONAL INC	1842 OLD NORCROSS RD 100	LAWRENCEVILLE	GA	30044
VISSER BROTHERS INC	1946 TURNER NW	GRAND RAPIDS	MI	49504
VISU SEWER CLEAN & SEAL INC	W230 N4855 BETKER RD	PEWAUKEE	WI	53072
WADES REFRIGERATION INC	P O BOX 2164	BATESVILLE	AR	72503
WALKER CONSTRUCTION CO INC	HWY 50 TO KAHOLA LAKE RD	EMPORIA	KS	66801
WALTERS MORGAN CONSTRUCTION INC	2616 TUTTLE CREEK BLVD	MANHATTAN	KS	66502
WEATHERCRAFT COMPANY OF GRAND ISLAND	PO BOX 80459	LINCOLN	NE	68501
WEATHERCRAFT COMPANY OF LINCOLN	545 J ST	LINCOLN	NE	68508
WEBB GROUNDS MAINTENANCE LLC	737 YOSEMITE DRIVE	INDIANAPOLIS	IN	46217
WEGMAN INC	608 W LASLEY	ST MARYS	KS	66546
WELDMATION INC	31720 STEPHENSON HIGHWAY	MADISON HEIGHTS	MI	48071
WES LOCHRIDGE & ASSOCIATES GENERAL CONTRACTORS	1520 S CLEVELAND AVE	JOPLIN	MO	64801
WESSELS CONSTRUCTION CO INC	1800 DES PLAINES AVE	FOREST PARK	IL	61030
WESTIN CONSTRUCTION COMPANY	10828 NESBITT AVE SO	BLOOMINGTON	MN	55437
WH BASS INC	5664 D PEACHTREE PKWY	NORCROSS	GA	30092
WHITE OAK CONSTRUCTION INC	105 INDUSTRIAL DRIVE	BALD KNOB	AR	72010
WHITE STAR CONSTRUCTION INC	6175 MIZE ROAD	SHAWNEE	KS	66226
WHITING TURNER CONTRACTING CO THE	300 E JOPPA RD	BALTIMORE	MD	21286
WHITWORTH COMMERCIAL	7423 CLEARHAVEN	DALLAS	TX	75248
WILKS MASONRY CORPORATION	16858 IH 20	CISCO	TX	76437
WINFIELD CONTRACTORS INC	212 NORTH PRAIRIE STREET	WAPELLO	IA	52653
WINGATE ARCHITECTURAL MILLWORKS CO	7516 US 59 NORTH	NACOGDOCHES	TX	75964
WISCONSIN FEED MILL BUILDERS INC	500 AMERICAN DRIVE	FRANCIS CREEK	WI	54214
WR NEWMAN & ASSOCIATES INC	2854 LOGAN ST	NASHVILLE	TN	37211
XENA HOMES INC	3901 100TH ST SW #6	LAKEWOOD	WA	98499
YOUNGLOVE CONSTRUCTION LLC	2015 EAST 7TH STREET	SIOUX CITY	IA	51101
ZIMMERMAN CONSTRUCTION COMPANY INC	12509 HEMLOCK ST	OVERLAND PARK	KS	66213
ZOLFO COOPER	101 EISENHOWER PKY 3RD FL	ROSELAND	NJ	07068

The Secretary of State is required by sections 347.141 and 359.481, RSMo 2000, to publish dissolutions of limited liability companies and limited partnerships. The content requirements for the one-time publishing of these notices are prescribed by statute. This listing is published pursuant to these statutes. We request that documents submitted for publication in this section be submitted in camera ready 8 1/2" x 11" manuscript by email to dissolutions@sos.mo.gov.

NOTICE OF CANCELLATION OF LIMITED PARTNERSHIP TO ALL CREDITORS OF AND CLAIMANTS AGAINST AULD INGLE D, LP

On December 29, 2010, Auld Ingle D, LP filed its Certificate of Cancellation with the Missouri Secretary of State. Cancellation became effective on December 31, 2010.

All claims against the LP must be submitted to Gary L. Myers, 4810 S. Lakewood Dr., St. Joseph, MO 64506.

All claims must include the name, address, and phone number of claimant; the amount claimed; the date on which the claim arose; basis of the claim; and documentation supporting the claim.

A claim against the LP will be barred unless a proceeding to enforce the claim is commenced within three (3) years after publication of this notice.

NOTICE OF WINDING UP AND DISSOLUTION OF LIMITED LIABILITY COMPANY TO ALL CREDITORS OF AND CLAIMANTS AGAINST FINDETT LLC.

On December 29, 2010, Findett LLC, a Missouri limited liability company (the "Company") filed its Notice of Winding Up and Articles of Termination with the Missouri Secretary of State. The Company requests that claimants against the Company present claims in writing to: Alan C. Witte, Attorney c/o Polsinelli Shughart PC, 100 South Fourth Street, Suite 1000, St. Louis, MO 63102. All claims must include (1) the name, address and telephone number of the claimant; (2) the amount claimed; (3) the basis of the claim; (4) the date on which the claim arose; and (5) documentation supporting the claim. All claims against the Company will be barred unless a proceeding to enforce the claim is commenced within three (3) years after the publication of this notice.

NOTICE OF WINDING UP AND DISSOLUTION OF LIMITED LIABILITY COMPANY TO ALL CREDITORS OF AND CLAIMANTS AGAINST SANTOVAC FLUIDS LLC.

On December 29, 2010, Santovac Fluids LLC, a Missouri limited liability company (the "Company") filed its Notice of Winding Up and Articles of Termination with the Missouri Secretary of State. The Company requests that claimants against the Company present claims in writing to: Alan C. Witte, Attorney c/o Polsinelli Shughart PC, 100 South Fourth Street, Suite 1000, St. Louis, MO 63102. All claims must include (1) the name, address and telephone number of the claimant; (2) the amount claimed; (3) the basis of the claim; (4) the date on which the claim arose; and (5) documentation supporting the claim. All claims against the Company will be barred unless a proceeding to enforce the claim is commenced within three (3) years after the publication of this notice.

NOTICE OF WINDING UP AND DISSOLUTION OF LIMITED LIABILITY COMPANY TO ALL CREDITORS OF AND CLAIMANTS AGAINST SYNERGY PRODUCTS LLC.

On December 29, 2010, Synergy Products LLC, a Missouri limited liability company (the "Company") filed its Notice of Winding Up and Articles of Termination with the Missouri Secretary of State. The Company requests that claimants against the Company present claims in writing to: Alan C. Witte, Attorney c/o Polsinelli Shughart PC, 100 South Fourth Street, Suite 1000, St. Louis, MO 63102. All claims must include (1) the name, address and telephone number of the claimant; (2) the amount claimed; (3) the basis of the claim; (4) the date on which the claim arose; and (5) documentation supporting the claim. All claims against the Company will be barred unless a proceeding to enforce the claim is commenced within three (3) years after the publication of this notice.

NOTICE OF DISSOLUTION OF LIMITED LIABILITY COMPANY TO ALL CREDITORS OF AND ALL CLAIMANTS AGAINST GRAND RIVER RESORT, LLC

On December 30, 2010, Grand River Resort, LLC filed a Notice of Winding Up for Limited Liability Company with the Missouri Secretary of State. Persons with claims against Grand River Resort, LLC may be submitted to: Betty Beach at: Hawthorn Bank, North Town Banking Center, 1891 Commercial, Warsaw, Missouri 65355. In order to file a claim with the limited liability company you must furnish the name, address, and telephone number of the claimant, the date on which a claim arose, the amount claimed, the basis for the claim, and the documentation for the claim. All claims against the limited liability company will be barred unless a proceeding to enforce the claim is commenced within three years after publication of this notice.

Notice of Dissolution to All Creditors of and Claimants Against BELLON ENVIRONMENTAL COMPANY

BELLON ENVIRONMENTAL COMPANY, a Missouri corporation (the "Corporation"),was dissolved on May 26, 2010, by filing Articles of Dissolution with the Missouri Secretary of State. Any and all claims against the Corporation must be in writing and sent by mail to Nicole M. Iannacone, Esq., Jenkins & Kling, P.C., 150 North Meramec Ave., Suite 400, St. Louis, MO 63105. Each claim must include:

1. The name, address, and telephone number of the claimant;
2. The amount of the claim;
3. The basis of the claim;
4. The date the claim arose; and
5. Any and all documentation relating to the claim.

A claim against the Corporation will be barred unless a proceeding to enforce the claim is commenced within two (2) years after the publication of this notice.

NOTICE OF CORPORATE DISSOLUTION TO ALL CREDITORS OF AND CLAIMANTS AGAINST COLUMBIA MILLWORK & SUPPLY CO.

Columbia Millwork and Supply Co., a Missouri corporation, filed its Articles of Dissolution with the Missouri Secretary of State, effective on December 30, 2010.

Any claims against the corporation must be submitted to the following address: Wally Bley, Bley Law Firm P.C., 1000 W. Nifong Blvd., Bldg. 4, Ste. 200, Columbia, MO 65203.

Each claim should include the following: (i) the name, address, and telephone number of the claimant; (ii) the amount claimed; (iii) the basis for the claim; (iv) the date(s) on which the event(s) on which the claim is based occurred; and (v) documentation supporting the claim.

All claims against the corporation will be barred unless a proceeding to enforce the claim is commenced within two (2) years after the publication of this notice.

NOTICE OF WINDING UP TO ALL CREDITORS OF AND CLAIMANTS AGAINST A LA CAMPAGNE, LLC

On December 29, 2010, A La Campagne, LLC, A Missouri limited liability company, filed its Notice of Winding Up with the Missouri Secretary of State.

You are hereby notified that if you believe you have a claim against A La Campagne, LLC, you must submit a summary in writing of the circumstances surrounding your claim to: A La Campagne, LLC; Attn: Nina Furstenau; 540 CC Highway; Fayette, MO 65248.

The summary must include the name and address of the claimant; the amount claimed; the basis for the claim; the date(s) on which the event(s) on which the claim is based occurred; a brief description of the nature of the debt or the basis for the claim; and documentation supporting the claim.

NOTICE: Because of the dissolution of A La Campagne, LLC, any claim against it will be barred unless a proceeding to enforce the claim is commenced within three (3) years after the publication date of the three notices authorized by statute, which ever is published last.

Notice of Dissolution of

Limited Liability Company

To All Creditors of and

Claimants Against

GAP Products, LLC

On January 12, 2011, GAP Products, LLC, a Missouri LLC ("Company") filed its Notice of Winding Up with the Missouri Secretary of State, effective on the filing date.

Claims against Company should be presented immediately to Company c/o Gary Schanzmeyer, 22 Oak Hollow Ln, Westphalia, MO 65085. Claims must include claimant's name, address and telephone; amount of claim; basis for the claim; and documentation of the claim. A claim against Company will be barred unless a proceeding to enforce the claim is commenced within three years after the publication of this notice.

NOTICE OF WINDING UP OF LIMITED LIABILITY COMPANY TO ALL CREDITORS OF AND CLAIMANTS AGAINST BIT O' HEAVEN DUCK CLUB, L.L.C.

On December 30, 2010, Bit O' Heaven Duck Club, L.L.C., a Missouri limited liability company ("Company"), filed its Notice of Winding Up with the Missouri Secretary of State, effective on the filing date.

All persons and organizations must submit to Company, c/o Clifford S. Brown, Carnahan, Evans, Cantwell & Brown, P.C., 2805 S. Ingram Mill, Springfield, Missouri 65804, a written summary of any claims against Company, including: 1) claimant's name, address and telephone number; 2) amount of claim; 3) date(s) claim accrued (or will accrue); 4) brief description of the nature of the debt or the basis for the claim; and 5) if the claim is secured, and if so, the collateral used as security.

Because of the dissolution, any claims against Company will be barred unless a proceeding to enforce the claim is commenced within three (3) years after the last of filing or publication of this Notice.

NOTICE OF DISSOLUTION

KOSTOVA PROPERTIES LLC

To: All creditors of and claimants against Kostova Properties LLC a Missouri Limited Liability Company.

On January 5, 2011 Kostova Properties LLC, a Missouri Limited Liability Company, Charter Number **LC0978455**, filed its notice of winding up with the Missouri Secretary of State.

Said limited liability company requests that all persons and organizations who have claims against it present them immediately by letter to the company c/o Thomas Edward Urschler, 8777 Big Bend Blvd., Suite B, Saint Louis, MO 63119.

All claims must include the following information:

1. Name and current address of claimant.
2. The amount claimed.
3. The clear and concise statement of the facts supporting the claim.
4. The date the claim was incurred.

NOTICE: Because of the dissolution of Kostova Properties LLC, any claims against it will be barred unless commenced within three (3) years after the publication of this notice.

This cumulative table gives you the latest status of rules. It contains citations of rulemakings adopted or proposed after deadline for the monthly Update Service to the *Code of State Regulations*, citations are to volume and page number in the *Missouri Register*, except for material in this issue. The first number in the table cite refers to the volume number or the publication year—30 (2005) and 31 (2006). MoReg refers to *Missouri Register* and the numbers refer to a specific *Register* page, R indicates a rescission, W indicates a withdrawal, S indicates a statement of actual cost, T indicates an order terminating a rule, N.A. indicates not applicable, RAN indicates a rule action notice, RUC indicates a rule under consideration, and F indicates future effective date.

Rule Number	Agency	Emergency	Proposed	Order	In Addition
	OFFICE OF ADMINISTRATION				
1 CSR 10	State Officials' Salary Compensation Schedule				30 MoReg 2435 35 MoReg 1815
1 CSR 10-15.010	Commissioner of Administration	36 MoReg 273	36 MoReg 448		
1 CSR 15-3.290	Administrative Hearing Commission		35 MoReg 1381	36 MoReg 232	
1 CSR 15-3.350	Administrative Hearing Commission	35 MoReg 1367	35 MoReg 1381	36 MoReg 232	
1 CSR 15-3.380	Administrative Hearing Commission	35 MoReg 1367	35 MoReg 1382	36 MoReg 232	
1 CSR 15-3.431	Administrative Hearing Commission		35 MoReg 1382	36 MoReg 232	
1 CSR 15-3.436	Administrative Hearing Commission	35 MoReg 1368	35 MoReg 1383	36 MoReg 233	
1 CSR 15-3.446	Administrative Hearing Commission	35 MoReg 1368	35 MoReg 1383	36 MoReg 233	
1 CSR 15-3.480	Administrative Hearing Commission		35 MoReg 1384	36 MoReg 233	
1 CSR 15-3.490	Administrative Hearing Commission	35 MoReg 1369	35 MoReg 1384	36 MoReg 233	
1 CSR 15-3.500	Administrative Hearing Commission		35 MoReg 1384	36 MoReg 233	
1 CSR 15-3.560	Administrative Hearing Commission		35 MoReg 1385	36 MoReg 234	
1 CSR 20-1.010	Personnel Advisory Board and Division of Personnel	35 MoReg 1369	35 MoReg 1385	36 MoReg 234	
1 CSR 20-1.030	Personnel Advisory Board and Division of Personnel	35 MoReg 1370	35 MoReg 1386	36 MoReg 234	
1 CSR 20-2.015	Personnel Advisory Board and Division of Personnel	35 MoReg 1370	35 MoReg 1386	36 MoReg 234	
1 CSR 20-3.010	Personnel Advisory Board and Division of Personnel	35 MoReg 1371	35 MoReg 1387	36 MoReg 234	
1 CSR 20-3.020	Personnel Advisory Board and Division of Personnel	35 MoReg 1372	35 MoReg 1387	36 MoReg 235	
1 CSR 20-3.030	Personnel Advisory Board and Division of Personnel	35 MoReg 1372	35 MoReg 1388	36 MoReg 235	
1 CSR 20-3.070	Personnel Advisory Board and Division of Personnel	35 MoReg 1373	35 MoReg 1388	36 MoReg 235	
1 CSR 20-3.080	Personnel Advisory Board and Division of Personnel	35 MoReg 1374	35 MoReg 1390	36 MoReg 235	
1 CSR 20-4.010	Personnel Advisory Board and Division of Personnel	35 MoReg 1375	35 MoReg 1390	36 MoReg 236	
1 CSR 20-4.020	Personnel Advisory Board and Division of Personnel	35 MoReg 1379	35 MoReg 1394	36 MoReg 236	
1 CSR 50-3.010	Missouri Ethics Commission	35 MoReg 1379	35 MoReg 1400	36 MoReg 674	
	DEPARTMENT OF AGRICULTURE				
2 CSR 30-1.010	Animal Health		35 MoReg 1845		
2 CSR 30-2.010	Animal Health		35 MoReg 1845		
2 CSR 30-2.020	Animal Health		35 MoReg 1846		
2 CSR 30-6.020	Animal Health		36 MoReg 524		
2 CSR 30-9.020	Animal Health	36 MoReg 217	36 MoReg 221		
2 CSR 70-11.060	Plant Industries	35 MoReg 721	35 MoReg 756 35 MoReg 1453	35 MoReg 1852	
2 CSR 80-6.041	State Milk Board		36 MoReg 224		
2 CSR 90	Weights and Measures				35 MoReg 1284
2 CSR 90-30.080	Weights and Measures		This Issue		
2 CSR 90-30.086	Weights and Measures		This Issue		
2 CSR 110-3.010	Office of the Director		35 MoReg 1848		
	DEPARTMENT OF CONSERVATION				
3 CSR 10-4.117	Conservation Commission		35 MoReg 1533	36 MoReg 236	
3 CSR 10-4.135	Conservation Commission		This Issue		
3 CSR 10-5.215	Conservation Commission		This Issue		
3 CSR 10-5.225	Conservation Commission		35 MoReg 1533	36 MoReg 236	
3 CSR 10-5.436	Conservation Commission		35 MoReg 1534	36 MoReg 237	
3 CSR 10-5.567	Conservation Commission		35 MoReg 1534	36 MoReg 237	
3 CSR 10-6.410	Conservation Commission		35 MoReg 1534	36 MoReg 237	
3 CSR 10-6.505	Conservation Commission		35 MoReg 1400	35 MoReg 1802	
3 CSR 10-6.525	Conservation Commission		35 MoReg 1535	36 MoReg 237	
3 CSR 10-6.535	Conservation Commission		35 MoReg 1401	35 MoReg 1802	
3 CSR 10-6.605	Conservation Commission		35 MoReg 1535	36 MoReg 237	
3 CSR 10-7.410	Conservation Commission		35 MoReg 1535	36 MoReg 237	
3 CSR 10-7.431	Conservation Commission		35 MoReg 1536	36 MoReg 238	
3 CSR 10-7.432	Conservation Commission		35 MoReg 1536	36 MoReg 238	
3 CSR 10-7.438	Conservation Commission		35 MoReg 1537	36 MoReg 238	

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3 CSR 10-7.445	Conservation Commission		35 MoReg 1537	36 MoReg 238	
3 CSR 10-7.450	Conservation Commission		This Issue		
3 CSR 10-7.455	Conservation Commission		35 MoReg 1537	36 MoReg 238	36 MoReg 676
3 CSR 10-8.510	Conservation Commission		35 MoReg 1538	36 MoReg 238	
3 CSR 10-8.515	Conservation Commission		This Issue		
3 CSR 10-9.105	Conservation Commission		35 MoReg 1538	36 MoReg 239	
3 CSR 10-9.110	Conservation Commission		35 MoReg 1541	36 MoReg 239	
3 CSR 10-9.430	Conservation Commission		35 MoReg 1542	36 MoReg 239	
3 CSR 10-9.440	Conservation Commission		35 MoReg 1542	36 MoReg 239	
3 CSR 10-9.442	Conservation Commission		35 MoReg 1542	36 MoReg 239	
3 CSR 10-10.711	Conservation Commission		This IssueR		
3 CSR 10-10.716	Conservation Commission		This IssueR		
3 CSR 10-11.155	Conservation Commission		35 MoReg 1545	36 MoReg 239	
3 CSR 10-11.160	Conservation Commission		35 MoReg 1545	36 MoReg 240	
3 CSR 10-11.180	Conservation Commission		35 MoReg 1545	36 MoReg 240	
3 CSR 10-11.181	Conservation Commission		35 MoReg 1546	36 MoReg 240	
3 CSR 10-11.182	Conservation Commission		35 MoReg 1547	36 MoReg 240	
3 CSR 10-11.205	Conservation Commission		35 MoReg 1547	36 MoReg 240	
3 CSR 10-11.210	Conservation Commission		35 MoReg 1547	36 MoReg 240	
3 CSR 10-11.215	Conservation Commission		35 MoReg 1548	36 MoReg 241	
3 CSR 10-12.110	Conservation Commission		35 MoReg 1401	35 MoReg 1802	
3 CSR 10-12.115	Conservation Commission		35 MoReg 1402	35 MoReg 1802	
3 CSR 10-12.125	Conservation Commission		35 MoReg 1402	35 MoReg 1803	
3 CSR 10-12.140	Conservation Commission		35 MoReg 1403	35 MoReg 1803	
3 CSR 10-12.145	Conservation Commission		35 MoReg 1404	35 MoReg 1803	
3 CSR 10-12.155	Conservation Commission		35 MoReg 1405	35 MoReg 1803	
	DEPARTMENT OF ECONOMIC DEVELOPMENT				
4 CSR 170-2.010	Missouri Housing Development Commission		35 MoReg 963R	35 MoReg 1803R	
4 CSR 170-2.100	Missouri Housing Development Commission		35 MoReg 963	35 MoReg 1803	
4 CSR 170-3.010	Missouri Housing Development Commission		35 MoReg 964R	35 MoReg 1804R	
4 CSR 170-3.100	Missouri Housing Development Commission		35 MoReg 964	35 MoReg 1804	
4 CSR 170-3.200	Missouri Housing Development Commission		35 MoReg 964	35 MoReg 1804	
4 CSR 170-4.010	Missouri Housing Development Commission		35 MoReg 965R	35 MoReg 1804R	
4 CSR 170-4.100	Missouri Housing Development Commission		35 MoReg 965	35 MoReg 1804	
4 CSR 170-4.200	Missouri Housing Development Commission		35 MoReg 966	35 MoReg 1804	
4 CSR 170-4.300	Missouri Housing Development Commission		35 MoReg 966	35 MoReg 1805	
4 CSR 170-5.010	Missouri Housing Development Commission		35 MoReg 967R	35 MoReg 1805R	
4 CSR 170-5.020	Missouri Housing Development Commission		35 MoReg 968R	35 MoReg 1805R	
4 CSR 170-5.030	Missouri Housing Development Commission		35 MoReg 968R	35 MoReg 1805R	
4 CSR 170-5.040	Missouri Housing Development Commission		35 MoReg 968R	35 MoReg 1805R	
4 CSR 170-5.050	Missouri Housing Development Commission		35 MoReg 969R	35 MoReg 1805R	
4 CSR 170-5.100	Missouri Housing Development Commission		35 MoReg 969	35 MoReg 1806	
4 CSR 170-5.200	Missouri Housing Development Commission		35 MoReg 970	35 MoReg 1806	
4 CSR 170-5.300	Missouri Housing Development Commission		35 MoReg 971	35 MoReg 1806	
4 CSR 170-5.400	Missouri Housing Development Commission		35 MoReg 971	35 MoReg 1806	
4 CSR 170-5.500	Missouri Housing Development Commission		35 MoReg 973	35 MoReg 1806	
4 CSR 170-6.010	Missouri Housing Development Commission		35 MoReg 973R	35 MoReg 1806R	
4 CSR 170-6.100	Missouri Housing Development Commission		35 MoReg 974	35 MoReg 1807	
4 CSR 170-6.200	Missouri Housing Development Commission		35 MoReg 975	35 MoReg 1807	
4 CSR 240-3.163	Public Service Commission		35 MoReg 1610		
4 CSR 240-3.164	Public Service Commission		35 MoReg 1629		
4 CSR 240-3.510	Public Service Commission		35 MoReg 1736		
4 CSR 240-20.093	Public Service Commission		35 MoReg 1647		
4 CSR 240-20.094	Public Service Commission		35 MoReg 1667		
4 CSR 240-22.010	Public Service Commission		35 MoReg 1737		
4 CSR 240-22.020	Public Service Commission		35 MoReg 1738		
4 CSR 240-22.030	Public Service Commission		35 MoReg 1741		
4 CSR 240-22.040	Public Service Commission		35 MoReg 1746		
4 CSR 240-22.045	Public Service Commission		35 MoReg 1749		
4 CSR 240-22.050	Public Service Commission		35 MoReg 1753		
4 CSR 240-22.060	Public Service Commission		35 MoReg 1761		
4 CSR 240-22.070	Public Service Commission		35 MoReg 1766		
4 CSR 240-22.080	Public Service Commission		35 MoReg 1769		
4 CSR 240-32.190	Public Service Commission		35 MoReg 1848		36 MoReg 190
4 CSR 240-123.080	Public Service Commission		35 MoReg 1686		
4 CSR 240-125.090	Public Service Commission		35 MoReg 1686		
	DEPARTMENT OF HIGHER EDUCATION				
6 CSR 10-2.080	Commissioner of Higher Education		36 MoReg 229		
6 CSR 10-2.150	Commissioner of Higher Education		36 MoReg 230		
	DEPARTMENT OF TRANSPORTATION				
7 CSR 10-16.010	Missouri Highways and Transportation Commission		35 MoReg 1173R	36 MoReg 241R	
7 CSR 10-16.020	Missouri Highways and Transportation Commission		35 MoReg 1173R 35 MoReg 1173	36 MoReg 241R 36 MoReg 241	
7 CSR 10-16.025	Missouri Highways and Transportation Commission		35 MoReg 1174	36 MoReg 242	
7 CSR 10-16.030	Missouri Highways and Transportation Commission		35 MoReg 1174R	36 MoReg 242R	

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7 CSR 10-16.035	Missouri Highways and Transportation Commission		35 MoReg 1175	36 MoReg 242	
7 CSR 10-16.040	Missouri Highways and Transportation Commission		35 MoReg 1178R	36 MoReg 243R	
7 CSR 10-16.045	Missouri Highways and Transportation Commission		35 MoReg 1178	36 MoReg 243	
7 CSR 10-16.050	Missouri Highways and Transportation Commission		35 MoReg 1180	36 MoReg 244	
7 CSR 10-25.010	Missouri Highways and Transportation Commission				35 MoReg 1818 36 MoReg 190
	DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS				
8 CSR 30-3.060	Division of Labor Standards		35 MoReg 1405	36 MoReg 245	
	DEPARTMENT OF MENTAL HEALTH				
9 CSR 30-4.045	Certification Standards	35 MoReg 1017	35 MoReg 1022	35 MoReg 1807	
	DEPARTMENT OF NATURAL RESOURCES				
10 CSR 10-5.330	Air Conservation Commission		36 MoReg 14 This Issue		
10 CSR 10-5.340	Air Conservation Commission		36 MoReg 32 This Issue		
10 CSR 10-5.442	Air Conservation Commission		36 MoReg 38 This Issue		
10 CSR 10-5.455	Air Conservation Commission		36 MoReg 47 This Issue		
10 CSR 10-5.480	Air Conservation Commission		35 MoReg 1080	36 MoReg 176	
10 CSR 10-6.020	Air Conservation Commission		36 MoReg 51 This Issue		
10 CSR 10-6.060	Air Conservation Commission	36 MoReg 218	36 MoReg 86 This Issue		36 MoReg 676
10 CSR 10-6.065	Air Conservation Commission	36 MoReg 219	36 MoReg 95 This Issue		36 MoReg 677
10 CSR 10-6.070	Air Conservation Commission		35 MoReg 1091	36 MoReg 182	
10 CSR 10-6.075	Air Conservation Commission		35 MoReg 1092	36 MoReg 183	
10 CSR 10-6.080	Air Conservation Commission		35 MoReg 1094	36 MoReg 183	
10 CSR 10-6.200	Air Conservation Commission		36 MoReg 103 This Issue		
10 CSR 10-6.300	Air Conservation Commission		This Issue		
10 CSR 10-6.400	Air Conservation Commission		35 MoReg 1095	36 MoReg 183	
10 CSR 20-8.110	Clean Water Commission		35 MoReg 1454		
10 CSR 23-4.010	Division of Geology and Land Survey		36 MoReg 118		
10 CSR 23-4.020	Division of Geology and Land Survey		36 MoReg 119		
10 CSR 23-4.030	Division of Geology and Land Survey		36 MoReg 120		
10 CSR 23-4.040	Division of Geology and Land Survey		36 MoReg 120R		
10 CSR 23-4.050	Division of Geology and Land Survey		36 MoReg 121		
10 CSR 23-4.060	Division of Geology and Land Survey		36 MoReg 121		
10 CSR 23-4.070	Division of Geology and Land Survey		36 MoReg 126R		
10 CSR 23-4.080	Division of Geology and Land Survey		36 MoReg 126		
10 CSR 140-2.010	Division of Energy	35 MoReg 1523	35 MoReg 1548	This Issue	
10 CSR 140-2.020	Division of Energy	35 MoReg 1525	35 MoReg 1550	This Issue	
10 CSR 140-2.030	Division of Energy	35 MoReg 1527R	35 MoReg 1554R	This IssueR	
10 CSR 140-8.010	Division of Energy		35 MoReg 1022	35 MoReg 1807	
	DEPARTMENT OF PUBLIC SAFETY				
11 CSR 45-1.010	Missouri Gaming Commission		35 MoReg 1095	35 MoReg 1811	
11 CSR 45-1.090	Missouri Gaming Commission		35 MoReg 1246	36 MoReg 183	
11 CSR 45-4.020	Missouri Gaming Commission		35 MoReg 1247	36 MoReg 183	
11 CSR 45-5.051	Missouri Gaming Commission		35 MoReg 1249	36 MoReg 184	
11 CSR 45-5.075	Missouri Gaming Commission		35 MoReg 1250	36 MoReg 184	
11 CSR 45-5.130	Missouri Gaming Commission		35 MoReg 1780		
11 CSR 45-5.200	Missouri Gaming Commission		35 MoReg 1250	36 MoReg 184	
11 CSR 45-5.300	Missouri Gaming Commission		35 MoReg 1251	36 MoReg 184	
11 CSR 45-7.070	Missouri Gaming Commission		35 MoReg 1780		
11 CSR 45-9.102	Missouri Gaming Commission		35 MoReg 1781		
11 CSR 45-9.105	Missouri Gaming Commission		35 MoReg 1781		
11 CSR 45-9.113	Missouri Gaming Commission		35 MoReg 1096	35 MoReg 1812	
11 CSR 45-9.114	Missouri Gaming Commission		35 MoReg 1098	35 MoReg 1812	
11 CSR 45-9.118	Missouri Gaming Commission		35 MoReg 1098	35 MoReg 1812	
11 CSR 45-9.119	Missouri Gaming Commission		35 MoReg 1781		
11 CSR 45-9.121	Missouri Gaming Commission		35 MoReg 1787		
11 CSR 45-9.122	Missouri Gaming Commission		35 MoReg 1787		
11 CSR 45-12.090	Missouri Gaming Commission		36 MoReg 127		
11 CSR 45-30.020	Missouri Gaming Commission		35 MoReg 1252	35 MoReg 1852	
11 CSR 45-30.025	Missouri Gaming Commission		35 MoReg 1252	35 MoReg 1852	
11 CSR 45-30.030	Missouri Gaming Commission		35 MoReg 1253R	35 MoReg 1852R	
11 CSR 45-30.035	Missouri Gaming Commission		35 MoReg 1253	35 MoReg 1853	
11 CSR 45-30.070	Missouri Gaming Commission		35 MoReg 1254	35 MoReg 1853	
11 CSR 45-30.175	Missouri Gaming Commission		35 MoReg 1254	35 MoReg 1853	
11 CSR 45-30.190	Missouri Gaming Commission	35 MoReg 1241	35 MoReg 1254	35 MoReg 1853	
11 CSR 45-30.205	Missouri Gaming Commission		35 MoReg 1255	35 MoReg 1853	
11 CSR 45-30.210	Missouri Gaming Commission		35 MoReg 1255	35 MoReg 1853	
11 CSR 45-30.225	Missouri Gaming Commission		35 MoReg 1256	35 MoReg 1854	
11 CSR 45-30.355	Missouri Gaming Commission		35 MoReg 1256	35 MoReg 1854	
11 CSR 45-30.535	Missouri Gaming Commission		35 MoReg 1256	35 MoReg 1854	
11 CSR 45-30.540	Missouri Gaming Commission		35 MoReg 1257	35 MoReg 1854	
11 CSR 45-30.600	Missouri Gaming Commission		35 MoReg 1257	35 MoReg 1854	

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	DEPARTMENT OF REVENUE				
12 CSR 10-3.052	Director of Revenue		35 MoReg 1405R	36 MoReg 184R	
12 CSR 10-3.112	Director of Revenue		35 MoReg 1257R	35 MoReg 1855R	
12 CSR 10-3.118	Director of Revenue		35 MoReg 1258R	35 MoReg 1855R	
12 CSR 10-3.126	Director of Revenue		35 MoReg 1258R	35 MoReg 1855R	
12 CSR 10-3.130	Director of Revenue		35 MoReg 1258R	35 MoReg 1855R	
12 CSR 10-3.134	Director of Revenue		35 MoReg 1258R	35 MoReg 1855R	
12 CSR 10-3.140	Director of Revenue		35 MoReg 1259R	35 MoReg 1855R	
12 CSR 10-3.146	Director of Revenue		35 MoReg 1259R	35 MoReg 1855R	
12 CSR 10-3.192	Director of Revenue		35 MoReg 1259R	35 MoReg 1856R	
12 CSR 10-3.194	Director of Revenue		35 MoReg 1259R	35 MoReg 1856R	
12 CSR 10-3.196	Director of Revenue		35 MoReg 1260R	35 MoReg 1856R	
12 CSR 10-3.198	Director of Revenue		35 MoReg 1260R	35 MoReg 1856R	
12 CSR 10-3.204	Director of Revenue		35 MoReg 1260R	35 MoReg 1856R	
12 CSR 10-3.228	Director of Revenue		35 MoReg 1260R	35 MoReg 1856R	
12 CSR 10-3.264	Director of Revenue		35 MoReg 1261R	35 MoReg 1856R	
12 CSR 10-3.266	Director of Revenue		35 MoReg 1261R	35 MoReg 1857R	
12 CSR 10-3.288	Director of Revenue		35 MoReg 1261R	35 MoReg 1857R	
12 CSR 10-3.330	Director of Revenue		35 MoReg 1314R	36 MoReg 184R	
12 CSR 10-3.333	Director of Revenue		35 MoReg 1314R	36 MoReg 185R	
12 CSR 10-3.350	Director of Revenue		35 MoReg 1314R	36 MoReg 185R	
12 CSR 10-3.352	Director of Revenue		35 MoReg 1315R	36 MoReg 185R	
12 CSR 10-3.354	Director of Revenue		35 MoReg 1315R	36 MoReg 185R	
12 CSR 10-3.376	Director of Revenue		35 MoReg 1315R	36 MoReg 185R	
12 CSR 10-3.382	Director of Revenue		35 MoReg 1315R	36 MoReg 185R	
12 CSR 10-3.388	Director of Revenue		35 MoReg 1316R	36 MoReg 185R	
12 CSR 10-3.406	Director of Revenue		35 MoReg 1316R	36 MoReg 186R	
12 CSR 10-3.414	Director of Revenue		35 MoReg 1316R	36 MoReg 186W	
12 CSR 10-3.426	Director of Revenue		35 MoReg 1406R	36 MoReg 186R	
12 CSR 10-3.428	Director of Revenue		35 MoReg 1406R	36 MoReg 186R	
12 CSR 10-3.431	Director of Revenue		35 MoReg 1406R	36 MoReg 186R	
12 CSR 10-3.434	Director of Revenue		35 MoReg 1406R	36 MoReg 186R	
12 CSR 10-3.436	Director of Revenue		35 MoReg 1407R	36 MoReg 187R	
12 CSR 10-3.438	Director of Revenue		35 MoReg 1407R	36 MoReg 187R	
12 CSR 10-3.443	Director of Revenue		35 MoReg 1407R	36 MoReg 187R	
12 CSR 10-3.444	Director of Revenue		35 MoReg 1408R	36 MoReg 187R	
12 CSR 10-3.446	Director of Revenue		35 MoReg 1408R	36 MoReg 187R	
12 CSR 10-3.490	Director of Revenue		35 MoReg 1408R	36 MoReg 187R	
12 CSR 10-3.496	Director of Revenue		35 MoReg 1408R	36 MoReg 188R	
12 CSR 10-3.498	Director of Revenue		35 MoReg 1476R	36 MoReg 245R	
12 CSR 10-3.504	Director of Revenue		35 MoReg 1476R	36 MoReg 245R	
12 CSR 10-3.506	Director of Revenue		35 MoReg 1476R	36 MoReg 245R	
12 CSR 10-3.522	Director of Revenue		35 MoReg 1476R	36 MoReg 245R	
12 CSR 10-3.534	Director of Revenue		35 MoReg 1477R	36 MoReg 245R	
12 CSR 10-3.536	Director of Revenue		35 MoReg 1477R	36 MoReg 245R	
12 CSR 10-3.542	Director of Revenue		35 MoReg 1477R	36 MoReg 246R	
12 CSR 10-3.556	Director of Revenue		35 MoReg 1477R	36 MoReg 246R	
12 CSR 10-3.565	Director of Revenue		35 MoReg 1478R	36 MoReg 246R	
12 CSR 10-3.585	Director of Revenue		35 MoReg 1478R	36 MoReg 246R	
12 CSR 10-3.620	Director of Revenue		35 MoReg 1478R	36 MoReg 246R	
12 CSR 10-3.626	Director of Revenue		35 MoReg 1478R	36 MoReg 246R	
12 CSR 10-3.856	Director of Revenue		35 MoReg 1479R	36 MoReg 247R	
12 CSR 10-3.862	Director of Revenue		35 MoReg 1479R	36 MoReg 247R	
12 CSR 10-3.868	Director of Revenue		35 MoReg 1687R	This IssueR	
12 CSR 10-3.870	Director of Revenue		35 MoReg 1479R	36 MoReg 247R	
12 CSR 10-3.884	Director of Revenue		35 MoReg 1687R	This IssueR	
12 CSR 10-3.886	Director of Revenue		35 MoReg 1687R	This IssueR	
12 CSR 10-3.896	Director of Revenue		35 MoReg 1687R	This IssueR	
12 CSR 10-24.305	Director of Revenue		35 MoReg 1316	36 MoReg 188	
12 CSR 10-26.020	Director of Revenue	35 MoReg 1309	35 MoReg 1317	36 MoReg 188	
12 CSR 10-41.010	Director of Revenue	35 MoReg 1735	35 MoReg 1787		
12 CSR 10-44.100	Director of Revenue		35 MoReg 1554	36 MoReg 674	
	DEPARTMENT OF SOCIAL SERVICES				
13 CSR 30-2.010	Child Support Enforcement		35 MoReg 1688		
13 CSR 40-2.370	Family Support Division		35 MoReg 1556		
13 CSR 40-91.040	Family Support Division *(Changed from 19 CSR 40-11.010)*		35 MoReg 1482	36 MoReg 674	
13 CSR 70-3.110	MO HealthNet Division		36 MoReg 128R		
13 CSR 70-3.130	MO HealthNet Division		35 MoReg 1261	36 MoReg 247	
13 CSR 70-15.010	MO HealthNet Division	35 MoReg 1067	35 MoReg 1108	35 MoReg 1813	
13 CSR 70-15.110	MO HealthNet Division	35 MoReg 1070	35 MoReg 1111	35 MoReg 1813	
13 CSR 70-15.160	MO HealthNet Division	35 MoReg 1527	35 MoReg 1556	This Issue	
13 CSR 70-20.320	MO HealthNet Division	35 MoReg 1072	35 MoReg 1114		
13 CSR 70-97.010	MO HealthNet Division		36 MoReg 128		

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	ELECTED OFFICIALS				
15 CSR 30-50.010	Secretary of State		35 MoReg 1479	36 MoReg 674	
15 CSR 30-51.020	Secretary of State		35 MoReg 1480	36 MoReg 675	
15 CSR 30-51.030	Secretary of State		35 MoReg 1481	36 MoReg 675	
15 CSR 30-51.173	Secretary of State		35 MoReg 1482	36 MoReg 675	
15 CSR 30-54.210	Secretary of State		36 MoReg 128		
15 CSR 60-8.010	Attorney General		36 MoReg 230		
	RETIREMENT SYSTEMS				
16 CSR 10-4.010	The Public School Retirement System of Missouri		35 MoReg 1262 36 MoReg 231	35 MoReg 1857	
16 CSR 10-5.010	The Public School Retirement System of Missouri		35 MoReg 1263	35 MoReg 1857	
16 CSR 10-6.040	The Public School Retirement System of Missouri		35 MoReg 1263 36 MoReg 231	35 MoReg 1857	
16 CSR 50-2.030	The County Employees' Retirement Fund		35 MoReg 1791		
16 CSR 50-3.010	The County Employees' Retirement Fund		35 MoReg 1791		
16 CSR 50-10.010	The County Employees' Retirement Fund		36 MoReg 527		
16 CSR 50-10.030	The County Employees' Retirement Fund		36 MoReg 527		
16 CSR 50-10.070	The County Employees' Retirement Fund		36 MoReg 527		
16 CSR 50-10.080	The County Employees' Retirement Fund		36 MoReg 528		
	PUBLIC DEFENDER COMMISSION				
18 CSR 10-2.010	Office of State Public Defender		35 MoReg 1180	36 MoReg 188	
	DEPARTMENT OF HEALTH AND SENIOR SERVICES				
19 CSR 30-1.074	Division of Regulation and Licensure	35 MoReg 1072	35 MoReg 1116	35 MoReg 1813	
19 CSR 40-11.010	Division of Maternal, Child and Family Health *(Changed to 13 CSR 40-91.040)*		35 MoReg 1482	36 MoReg 674	
19 CSR 60-50	Missouri Health Facilities Review Committee				36 MoReg 192 36 MoReg 248 36 MoReg 677
19 CSR 60-50.200	Missouri Health Facilities Review Committee		35 MoReg 1562		
19 CSR 60-50.300	Missouri Health Facilities Review Committee		35 MoReg 1562		
19 CSR 60-50.400	Missouri Health Facilities Review Committee		35 MoReg 1563		
19 CSR 60-50.410	Missouri Health Facilities Review Committee		35 MoReg 1564		
19 CSR 60-50.420	Missouri Health Facilities Review Committee		35 MoReg 1565		
19 CSR 60-50.430	Missouri Health Facilities Review Committee		35 MoReg 1566		
19 CSR 60-50.440	Missouri Health Facilities Review Committee		35 MoReg 1569		
19 CSR 60-50.450	Missouri Health Facilities Review Committee		35 MoReg 1569		
19 CSR 60-50.470	Missouri Health Facilities Review Committee		35 MoReg 1571		
19 CSR 60-50.500	Missouri Health Facilities Review Committee		35 MoReg 1571		
19 CSR 60-50.600	Missouri Health Facilities Review Committee		35 MoReg 1572		
19 CSR 60-50.700	Missouri Health Facilities Review Committee		35 MoReg 1572		
19 CSR 60-50.800	Missouri Health Facilities Review Committee		35 MoReg 1573		
	DEPARTMENT OF INSURANCE, FINANCIAL INSTITUTIONS AND PROFESSIONAL REGISTRATION				
20 CSR	Construction Claims Binding Arbitration Cap				33 MoReg 2446 35 MoReg 654 36 MoReg 192
20 CSR	Medical Malpractice				31 MoReg 616 32 MoReg 545
20 CSR	Sovereign Immunity Limits				33 MoReg 2446 35 MoReg 318
20 CSR	State Legal Expense Fund Cap				33 MoReg 2446 35 MoReg 654 36 MoReg 192
20 CSR 400-2.180	Life, Annuities and Health		35 MoReg 1485		
20 CSR 2030-6.015	Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects	35 MoReg 1242	35 MoReg 1264	35 MoReg 1858	
20 CSR 2063-1.005	Behavior Analyst Advisory Board		36 MoReg 129		
20 CSR 2063-1.010	Behavior Analyst Advisory Board	36 MoReg 5	36 MoReg 132		
20 CSR 2063-1.015	Behavior Analyst Advisory Board	36 MoReg 6	36 MoReg 135		
20 CSR 2063-1.020	Behavior Analyst Advisory Board		36 MoReg 140		
20 CSR 2063-2.005	Behavior Analyst Advisory Board	36 MoReg 7	36 MoReg 143		
20 CSR 2063-2.010	Behavior Analyst Advisory Board		36 MoReg 148		
20 CSR 2063-2.015	Behavior Analyst Advisory Board	36 MoReg 8	36 MoReg 153		
20 CSR 2063-3.005	Behavior Analyst Advisory Board	36 MoReg 9	36 MoReg 156		
20 CSR 2063-4.005	Behavior Analyst Advisory Board	36 MoReg 10	36 MoReg 159		
20 CSR 2063-4.010	Behavior Analyst Advisory Board		36 MoReg 162		
20 CSR 2063-5.005	Behavior Analyst Advisory Board	36 MoReg 11	36 MoReg 167		
20 CSR 2070-2.090	State Board of Chiropractic Examiners	35 MoReg 1609			
20 CSR 2110-2.240	Missouri Dental Board		35 MoReg 1267	35 MoReg 1858	
20 CSR 2120-2.100	State Board of Embalmers and Funeral Directors	35 MoReg 1242	35 MoReg 1267	35 MoReg 1858	
20 CSR 2120-2.105	State Board of Embalmers and Funeral Directors		35 MoReg 1271R	35 MoReg 1858R	
20 CSR 2150-2.080	State Board of Registration for the Healing Arts	36 MoReg 13	36 MoReg 173		

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20 CSR 2150-7.010	State Board of Registration for the Healing Arts		35 MoReg 1791		
20 CSR 2150-7.100	State Board of Registration for the Healing Arts		35 MoReg 1792		
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20 CSR 2234-1.050	Board of Private Investigator Examiners		35 MoReg 1690		
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1 CSR 20-1.030	Personnel Rules	35 MoReg 1370	Sept. 7, 2010	March 5, 2011
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20 CSR 2263-2.045	Provisional Licenses	35 MoReg 1311	Aug. 28, 2010	Feb. 24, 2011
20 CSR 2263-2.050	Application for Licensure as a Social Worker	35 MoReg 1312	Aug. 28, 2010	Feb. 24, 2011
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22 CSR 10-2.053	High Deductible Health Plan Benefit Provisions and Covered Charges	36 MoReg 365	Jan. 1, 2011	June 29, 2011
22 CSR 10-2.054	Medicare Supplement Plan Benefit Provisions and Covered Charges	36 MoReg 366	Jan. 1, 2011	June 29, 2011
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22 CSR 10-3.075	Review and Appeals Procedure	36 MoReg 434	Jan. 20, 2011	June 29, 2011

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22 CSR 10-3.090	Pharmacy Benefit Summary	36 MoReg 437	Jan. 1, 2011	June 29, 2011
22 CSR 10-3.092	Dental Benefit Summary	36 MoReg 439	Jan. 1, 2011	June 29, 2011
22 CSR 10-3.093	Vision Benefit Summary	36 MoReg 441	Jan. 1, 2011	June 29, 2011

Executive Orders	Subject Matter	Filed Date	Publication
	2011		
11-05	Orders the Missouri Department of Transportation to assist local jurisdictions in counties that: 1) received record snow falls; and 2) continuing snow clearance exceed their capabilities	Feb. 4, 2011	Next Issue
11-04	Activates the state militia in response to severe weather that began on January 31, 2011	Jan. 31, 2011	Next Issue
11-03	Declares a state of emergency exists in the state of Missouri and directs that the Missouri State Emergency Operations Plan be activated	Jan. 31, 2011	Next Issue
11-02	Extends the declaration of emergency contained in Executive Order 10-27 and the terms of Executive Order 11-01 through February 28, 2011	Jan. 28, 2011	Next Issue
11-01	Gives the Director of the Department of Natural Resources the authority to temporarily suspend regulations in the aftermath of severe winter weather that began on December 30	Jan. 4, 2011	This Issue
	2010		
10-27	Declares a state of emergency and directs the Missouri State Emergency Operations Plan be activated due to severe weather that began on December 30	Dec. 31, 2010	36 MoReg 446
Emergency Declaration	Proclaims an emergency declaration concerning the damage and structural integrity of the State Route A bridge over the Weldon Fork of the Thompson River	Sept. 28, 2010	35 MoReg 1531
10-26	Designates members of the governor's staff to have supervisory authority over certain departments, divisions, and agencies	Sept. 24, 2010	35 MoReg 1529
10-25	Extends the declaration of emergency contained in Executive Order 10-22 for the purpose of protecting the safety and welfare of our fellow Missourians	July 20, 2010	35 MoReg 1244
10-24	Creates the Code of Fair Practices for the Executive Branch of State Government and supersedes paragraph one of Executive Order 05-30	July 9, 2010	35 MoReg 1167
Emergency Declaration	Proclaims that an emergency exists concerning the damage and structural integrity of the U.S. Route 24 bridge over the Grand River	July 2, 2010	35 MoReg 1165
10-23	Activates the state militia in response to severe weather that began on June 12	June 23, 2010	35 MoReg 1078
10-22	Declares a state of emergency and directs the Missouri State Emergency Operations Plan be activated due to severe weather that began on June 12	June 21, 2010	35 MoReg 1076
10-21	Activates the Missouri State Emergency Operations Center	June 15, 2010	35 MoReg 1018
10-20	Establishes the Missouri Civil War Sesquicentennial Commission	April 2, 2010	35 MoReg 754
10-19	Amends Executive Order 09-17 to give the commissioner of the Office of Administration supervisory authority over the Transform Missouri Project	March 2, 2010	35 MoReg 637
10-18	Establishes the Children in Nature Challenge to challenge Missouri communities to take action to enhance children's education about nature, and to increase children's opportunities to personally experience nature and the outdoors	Feb. 26, 2010	35 MoReg 573
10-17	Establishes a Missouri Emancipation Day Commission to promote, consider, and recommend appropriate activities for the annual recognition and celebration of Emancipation Day	Feb. 2, 2010	35 MoReg 525
10-16	Transfers the scholarship portion of the A+ Schools Program from the Missouri Department of Elementary and Secondary Education to the Missouri Department of Higher Education	Jan. 29, 2010	35 MoReg 447
10-15	Transfers the Breath Alcohol Program from the Missouri Department of Transportation to the Missouri Department of Health and Senior Services	Jan. 29, 2010	35 MoReg 445
10-14	Designates members of the governor's staff to have supervisory authority over certain departments, divisions, and agencies	Jan. 29, 2010	35 MoReg 443
10-13	Directs the Department of Social Services to disband the Missouri Task Force on Youth Aging Out of Foster Care	Jan. 15, 2010	35 MoReg 364
10-12	Rescinds Executive Orders 98-14, 95-21, 95-17, and 94-19 and terminates the Governor's Commission on Driving While Intoxicated and Impaired Driving	Jan. 15, 2010	35 MoReg 363
10-11	Rescinds Executive Order 05-41 and terminates the Governor's Advisory Council for Veterans Affairs and assigns its duties to the Missouri Veterans Commission	Jan. 15, 2010	35 MoReg 362
10-10	Rescinds Executive Order 01-08 and terminates the Personal Independence Commission and assigns its duties to the Governor's Council on Disability	Jan. 15, 2010	35 MoReg 361

Executive Orders	Subject Matter	Filed Date	Publication
10-09	Rescinds Executive Orders 95-10, 96-11, and 98-13 and terminates the Governor's Council on AIDS and transfers their duties to the Statewide HIV/STD Prevention Community Planning Group within the Department of Health and Senior Services	Jan. 15, 2010	35 MoReg 360
10-08	Rescinds Executive Order 04-07 and terminates the Missouri Commission on Patient Safety	Jan. 15, 2010	35 MoReg 358
10-07	Rescinds Executive Order 01-16 and terminates the Missouri Commission on Intergovernmental Cooperation	Jan. 15, 2010	35 MoReg 357
10-06	Rescinds Executive Order 05-13 and terminates the Governor's Advisory Council on Plant Biotechnology and assigns its duties to the Missouri Technology Corporation	Jan. 15, 2010	35 MoReg 356
10-05	Rescinds Executive Order 95-28 and terminates the Missouri Board of Geographic Names	Jan. 15, 2010	35 MoReg 355
10-04	Rescinds Executive Order 03-10 and terminates the Missouri Energy Policy Council	Jan. 15, 2010	35 MoReg 354
10-03	Rescinds Executive Order 03-01 and terminates the Missouri Lewis and Clark Bicentennial Commission	Jan. 15, 2010	35 MoReg 353
10-02	Rescinds Executive Order 07-29 and terminates the Governor's Advisory Council on Aging and assigns its duties to the State Board of Senior Services	Jan. 15, 2010	35 MoReg 352
10-01	Rescinds Executive Order 01-15 and terminates the Missouri Commission on Total Compensation	Jan. 15, 2010	35 MoReg 351

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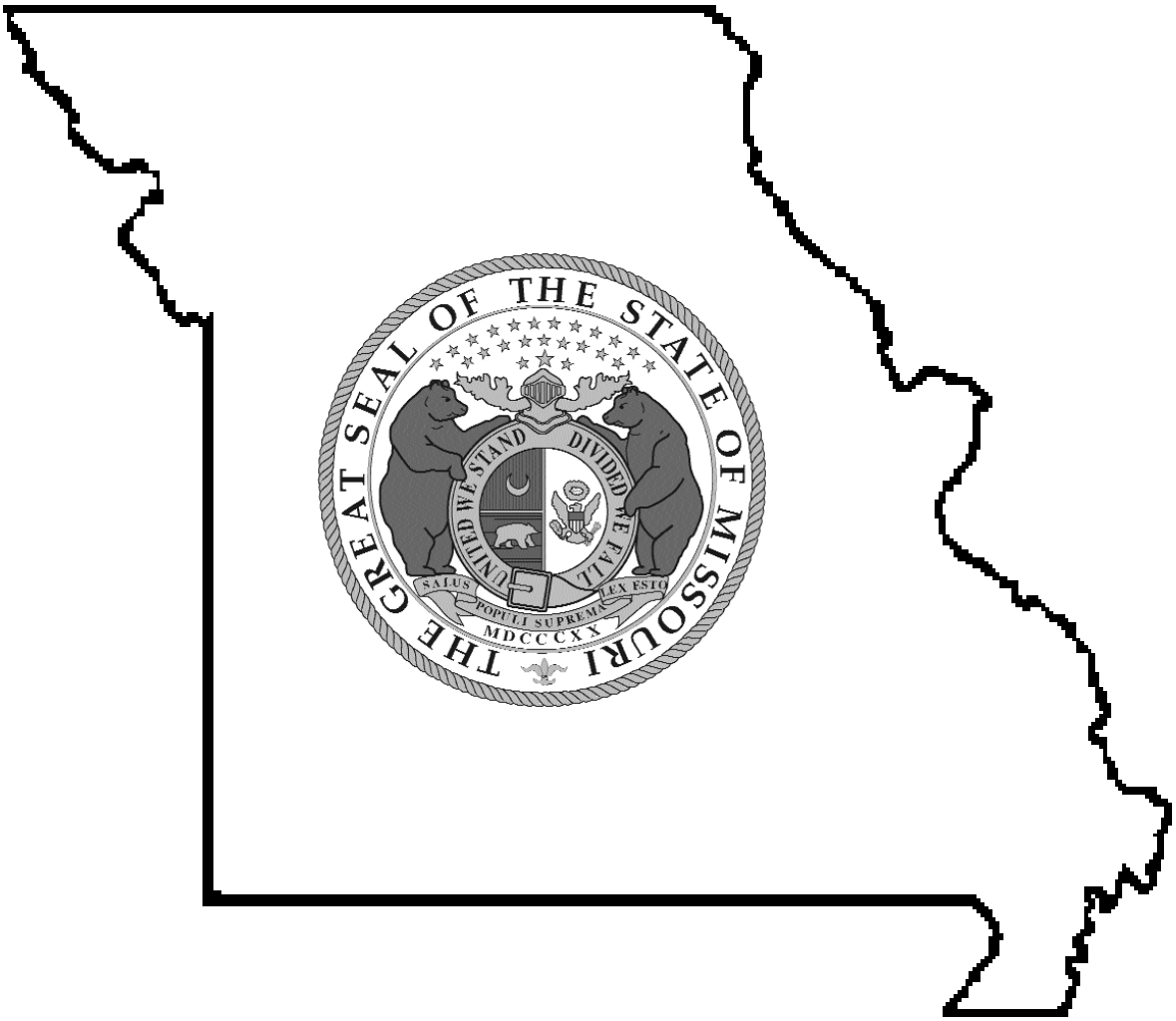

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